

OLD!
THE ESSENTIAL GUIDE TO CLASSIC GAMES
retro GAMER
AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO-GEO | SONY | COIN-OP | MOBILE
SWITCH ON TO HISTORY
THE 19 RETRO FRANCHISES DOMINATING NINTENDO'S BRAND-NEW CONSOLE
11 MEGA DRIVE GEMS
LOVELY OBSCURITES YOU NEED TO DISCOVER
THE LEGEND OF ZELDA
A LINK TO THE PAST
TAKASHI TEZUKA LIFTS THE LID ON DIRECTING NINTENDO'S 2D MASTERPIECE
MAKING OF URIDUM 2
ANDREW BRAYBROOK ON HIS EPIC SHOOTER
BUBSY'S 3D DISASTER
THE SAD STORY BEHIND EIDETIC'S AWFUL ATROCITY
ALSO INSIDE
SAVAGE
ACTION MAX
BACTRON
SUPER FAMICOM
BOB SMITH
GAME BOY PRINTER
LIFE
165
DEFINING APPLE II GAMES
THE TITLES THAT INSPIRED A GENERATION OF US CODERS
REVISITING ALIEN STORM
YOUR ULTIMATE GUIDE TO SEGA'S SCI-FI BLASTER
THE MAKING OF BLACK
ALEX WARD ON CRITERION'S AHEAD-OF-ITS-TIME FPS
Future
LOAD 165
Digital Edition
GreatDigitalMags.com



THE CLASSIC IS BACK

THE DAWN OF A NEW ERA

This brand new SEGA Mega Drive Console (25th Sonic the Hedgehog Anniversary Edition) is a perfect and compact retro games console video game player.

PACKED FULL OF NOSTALGIA

The SEGA Mega Drive Console is loaded with a whopping 80 SEGA and SEGA Mega Drive games including hits as Sonic the Hedgehog (1 and 2) and Mortal Kombat (1, 2 and 3), this retro games wireless console is an incredible device and the perfect gift for kids and adults. The console comes with two user friendly wireless SEGA Mega Drive controllers and is compatible with original SEGA Mega Drive cartridges!



WHY WE LOVE THIS CONSOLE

"The SEGA Mega Drive was the first console I remember unboxing. I remember firing up Golden Axe and playing it for hours and hours on end. I really like this new version as it combines the convenience of the 80 built-in games, with the cartridge slot, for those who still own the original carts. It comes with 2 controllers, so you can enjoy all of the multi-player elements of the games. I think at the price point it's at, it's excellent value!" - Andy Pearson, FunStock Retro General Manager

A TASTE OF WHAT'S INCLUDED

Includes games such as Altered Beast, Bonanza Bros, Flicky, Golden Axe II, Mortal Kombat (1 to 3), Shinobi III, Sonic the Hedgehog (1 and 2) and many more!

80 BUILT-IN GAMES. 2 PLAYER. PLAY YOUR OLD CARTRIDGES



ALEX KIDD: THE ENCHANTED CASTLE
Alex Kidd is punching, kicking and leaping through Paperock Planet, trying to save his dad!



ALIENSTORM
Shape-changing alien scum take over your city. Fry the slimy horrors and smash their bid for global conquest.



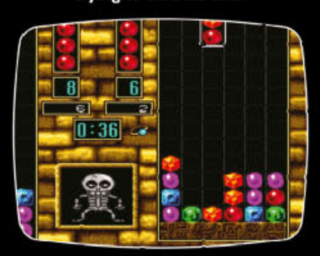
ALTERED BEAST
Enter a time when men were warriors and Gods ruled the world. A time of good against evil, a place of danger.



ARROW FLASH
In the 30th century, Viking terrorists, led by the vicious Great Hilagi, are plundering and destroying planets throughout the Galaxy.



BONANZA BROS.
Robo and Mobo are the clumsiest thieves around. They're in deep trouble now, and they need your help to avoid becoming jailbirds!



COLUMNS III
Arrange the blocks of jewels falling from the top of the screen. Dont allow them to pile up to the top, or you will lose the game.



GOLDEN AXE II
Chop down the forces of evil in this intense sequel to Golden Axe. Battle the dreaded Dark Guld with the Barbarian, the Amazon and the Dwarf.



SHADOW DANCER
The Shinobi explosion is back! The master of stealth and the death-dealing art of Shuriken returns to avenge the murder of his friend Kato.



SHINOBI III
Shape-changing alien scum take over your city. Fry the slimy horrors and smash their bid for global conquest.



SONIC THE HEDGEHOG
Super Speed! Bust the video game speed barrier wide open with Sonic the Hedgehog



SONIC THE HEDGEHOG II
Super Speed! Sonic's back and better than ever. He's a blur in blue! A blaze of action! With his new Super Spin Dash



SONIC THE HEDGEHOG III
Swing from vines, launch new attacks, survive deadly traps and summon Tails to airlift Sonic out of danger.



MORTAL KOMBAT
The #1 arcade hit is here: from Sub-Zero, Rayden and the rest of the Kombat Warriors to the grueling endurance and intense mirror matches!



MORTAL KOMBAT II
Battle to defeat the shape-shifting demon Shang Tsung and his ruthless master, Shao Kahn.



MORTAL KOMBAT III
Get ready for the fight of your life... 14 selectable fighters, including 8 new characters, 2 new bosses and 1 new fighter hidden within the game!



THE RETROBATES FAVOURITE ZELDA GAME



DARRAN JONES
In recent years I've been drawn back to *A Link To The Past*. It's an excellent adventure. Just ask Sam and Drew, they're both playing it now.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine
Currently playing:
Dragon's Crown
Favourite game of all time:
Strider



NICK THORPE
I've got a soft spot for the cartoon charms of *Wind Waker* – it still looks phenomenal today.
Expertise:
Owning five Master Systems (I sold two)
Currently playing:
Yakuza 0
Favourite game of all time:
Sonic The Hedgehog



DREW SLEEP
I picked up *Oracle Of Ages* when I had to stay at my Mum's work for the day and it got me through what could've been a tortuously boring ordeal.
Expertise:
Sneaking in GBA sessions during work time [P45's in the post – Ed.]
Currently playing:
The Witcher 3: Wild Hunt
Favourite game of all time:
Final Fantasy VIII



SAM RIBBITS
I'm on my first adventure with Link at the moment… The jury's still out on this one.
Expertise:
Schooling Nick with three-pointers on *Street Hoops*. **Swish**
Currently playing:
The Legend Of Zelda: A Link To The Past
Favourite game of all time:
Croc: Legend Of The Gobbos



PAUL DRURY
As with many great series, it's the first encounter that makes the biggest impression so for me, it's *Link's Awakening* for countless magical hours on the bus.
Expertise:
Hieroglyphics
Currently playing:
Gravity Rush 2
Favourite game of all time:
Sheep In Space



LUKE ALBIGÉS
Link's Awakening on the 2D side, *Wind Waker* for 3D. Both are absolutely incredible.
Expertise:
Real-life Pokémon professor
Currently playing:
Shantae: Half-Genie Hero
Favourite game of all time:
Micro Machines 2: Turbo Tournament

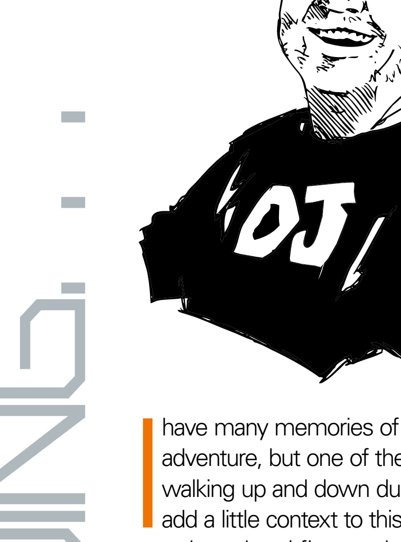



GRAEME MASON
I've never played one, they just don't appeal to me. Sorry!
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
Doom (2016)
Favourite game of all time:
Resident Evil 4



DAVID CROOKES
I have a real soft spot for *The Phantom Hourglass* due the way it utilised the features of the DS.
Expertise:
Amstrad, Lynx, adventures, Dizzy, and PlayStation (but is it retro? Debate!)
Currently playing:
Crash Team Racing
Favourite game of all time:
Broken Sword

LOADING...



I have many memories of Link's first 16-bit adventure, but one of the strongest involved walking up and down dungeon steps. To add a little context to this statement let's just say that when I first purchased my US SNES I didn't really receive the benefit of Dolby Pro Logic as my TV didn't support it. When I purchased my first stereo unit my mate, Paul, resoldered my RGB lead so I could connect it to the stereo and fully enable the brilliant sound of the SNES.

The difference it made felt phenomenal in the early Nineties and I soon began to hear all sorts of enhancements that I hadn't picked up on before, from the swinging chandeliers in *Super Castlevania IV* to the extra pop of the *Lemmings* soundtrack. It was ascending and descending the stairs in *Zelda* that left the biggest memory on me, where Link's movements would go from one speaker to the other. The echo effect on it was so good that I'd do nothing more than simply walk up and down them as many times as I could.

It's something of a pleasure, then, to finally interview two of the developers whose game had such a huge impact on me growing up – even if it affected me in a way they probably weren't expecting…

Enjoy the magazine



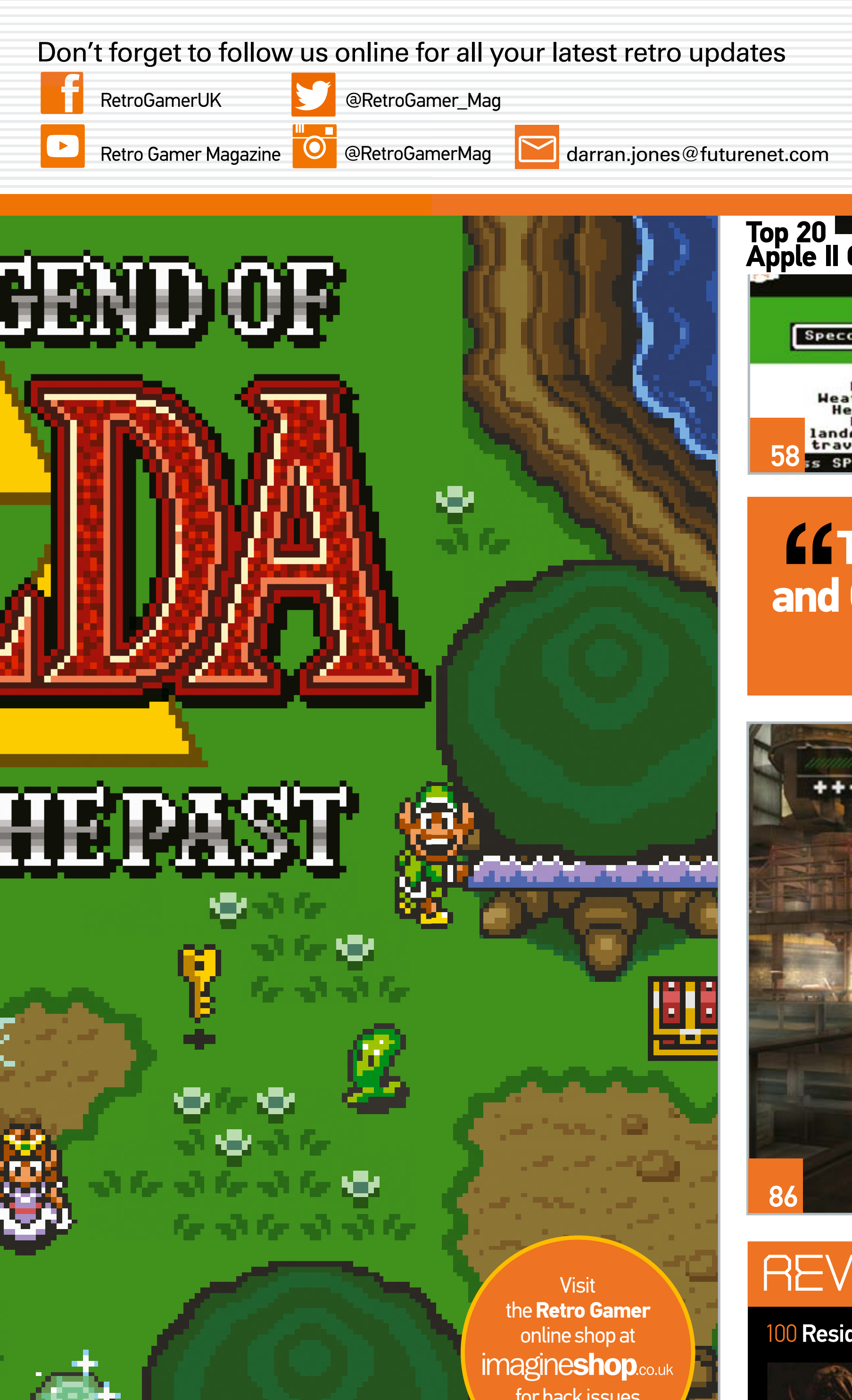


CONTENTS

>> **Load 165** Breathing new life into classic games

Don't forget to follow us online for all your latest retro updates

RetroGamerUK | @RetroGamer_Mag
Retro Gamer Magazine | @RetroGamerMag | darran.jones@futurenet.com





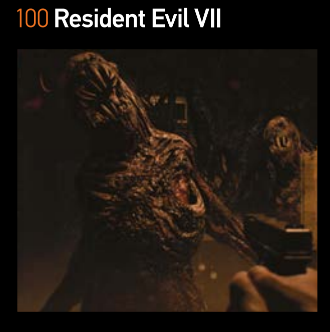


"Things would be broken… Me and Craig were sat there crying on Christmas Eve"





REVIEWS



ESSENTIALS



CRASH LANDING ON PS4

We speak to Vicarious Visions about the return of everyone's favourite bandicoot



CONTENTS

One of 2016's most exciting retro announcements was the return of Crash Bandicoot in *Crash Bandicoot: N. Sane Trilogy*. The compilation is scheduled for release later this year as a PlayStation 4-exclusive and features enhanced remakes of the original three PlayStation games. To find out more about this exciting upcoming release, we spoke to Kara Massie, the game's producer at Vicarious Visions…

What has sparked this *Crash* revival?

Many factors inspired the *Crash Bandicoot N. Sane Trilogy*. Foremost, echoing Sony's Shuhei Yoshida, 'People asked us for it.' These games hold a huge place in peoples' hearts and memories. Crash on PlayStation was important to many fans 20 years ago; he belonged to them. He still does.

The revival is also timely because, hey, it's Crash's 20th birthday. He snuck into *Uncharted 4*; he got his own level in *Skylanders Imaginators*; and he appeared in an episode of *Skylanders Academy*. So, it seems he's telling us that he's ready for a comeback.

Personally, I'm really excited to introduce the furry marsupial to a whole new set of gamers that will be forging new memories to reminisce over 20 years from now.



» [PS4] It's easy to forget that much of the original game was played from a traditional side-on viewpoint.

Were the original *Crash Bandicoot* games played for reference?

Oh, yeah! We broke a controller or two playing the games. And because the *Crash* franchise is so beloved, groundbreaking, and top of its genre, the games are also very well documented. We've studied everything from original design documents and concept art, to developer interviews, to articles, playthroughs, commentaries, and even fan forums. The hardcore fans know these games inside-out!

We studied and played until our team embodied *Crash*. I mean, if you were to watch us work now, you wouldn't see us with the original game side-by-side our new work. We know how it should feel. Of course, we do check back at times to ensure we're nailing the feel and not missing a single moment (because the game is full of fun little details). But mostly, we're allowing ourselves to recreate it using both modern and our personal sensibilities. We're enjoying ourselves while we embellish, enhance, and improve wherever we can, but always without losing the heart of the original.

What's the biggest challenge you've faced from a technical point of view?

I posed this question to a few of our engineers and technical designers, and all of their examples speak to the challenge of nailing every detail and edge case from the originals using a completely different codebase and physics engine. For example, reverse-engineering the crate stack system has



» [PS4] Vicarious Visions has added its own flourishes in the remasters, as shown here.

> **"Hardcore fans know this game inside-out, and we read a lot of their material when we started"**
> Kara Massie

been *N. Sane* (sorry about that). On the surface it seemed very simple, but this turned out to an incredibly deep system to crack. Five times now, we've thought we had everything, yet we keep finding more stuff.

Getting analogue controls to feel good and be as precise as the original D-pad input has been tricky for us. Yet we know if we ship this game with Crash's handling not spot on, we might all need to change our names and go in deep hiding.

How did you choose the graphical style for the remasters?

Overall, we know we've hit the 'sweet spot' when the games look and play like the originals, yet also feel totally modern at the same time.

We start with the original shape language and colour pallets, and we reference any original concepts that exist. Then, because we don't have the technical limitations of the original games, and with the addition of physical based lighting, we are able to create the soft, cartoony, and stylised look of the originals while adding in extra detail using more complex shaders that react in real time to our lighting.

The 'Disembodied Hand' enemy from Slippery Climb is a great illustration of how we're taking advantage of contemporary tech to produce a modern style, but how we're also taking opportunities to add our own little fun details when it feels right.

You will see in the final version that it still uses the same proportions and animation as the original, but now has a torso and head attached with flesh, cloth, metal, and hair that reacts as each would to the stormy environment. I hope it shows how passionate the team is about this!

Have you been paying attention to *Crash Bandicoot*'s fanbase?

What?! There's a vocal *Crash* fanbase?! Seriously… Yes and no.

Like I said, hardcore fans know this game inside out, and we especially read a lot of their material when we first started preproduction. We still do, somewhat. For example, recently there were some comments that the new Wumpa Fruit collection sound didn't resonate. We listened to it again and realized that there was, in fact, a bug that we've since fixed.



» [PS4] This shot of N Sanity Beach shows the enormous visual upgrade in this remaster.

That said, we all have to tune it out sometimes, too. Not only are we very busy, we need to also trust our own sensibilities and sometimes bring the fans to new places they wouldn't have considered until they're happily there. Our work is, in essence, a love letter to *Crash* and *Crash* fans. We know they feel very protective of *Crash*, and we want them to trust that we're equally so. Reading the overwhelming responses to our work after its first reveal was like getting a love letter back. Thank you, thank you! *

WHAT'S IN THE CRATE?

The three games that make up the Crash Bandicoot: N. Sane Trilogy



CRASH BANDICOOT (1996)

The original game sees Crash, the subject of a failed experiment by Dr Neo Cortex, attempting to rescue the lovely Tawna – a fellow bandicoot who Crash had become smitten with. Along the way he journeys across environments including a jungle, tribal villages, a power station and Neo Cortex's imposing castle. The game was a huge success, selling 6.82 million copies.



CRASH BANDICOOT 2: CORTEX STRIKES BACK (1997)

Crash's first sequel saw him working *with* Neo Cortex in a bid to prevent the destruction of the planet. Naughty Dog took the game in a non-linear direction, allowing Crash to choose from up to five levels at a time. With 7.58 million copies sold, this is the most popular game of the original *Crash Bandicoot* trilogy.



CRASH BANDICOOT 3: WARPED (1998)

Dr Nefarious Tropy has joined Neo Cortex and the evil sentient mask Uka Uka to steal powerful gems using a time travel machine and it's up to Crash has to venture to levels throughout time. Lots of new gameplay types were introduced for the game, including motorbike, jet ski and swimming sections.

MAGICAL SOUND SHOWER



Fans of the music in Sega games will be overjoyed to hear that the company has now released many of its soundtracks on the streaming service Spotify. A great deal of classics have been included in the selection, such as *OutRun*, *Fantasy Zone*, *NiGHTS Into Dreams*, *Power Drift*, *Skies Of Arcadia*, *Golden Axe*, the *Alex Kidd* series and a range of *Sonic The Hedgehog* games. While many of these albums have seen releases in Japan, this is the first time that Western fans will have had easy official access to some excellent rare tracks.

RETRON 5 GOES THREE BETTER

Prolific retro hardware manufacturer Hyperkin is introducing a brand-new accessory for its RetroN 5 console, allowing it to play games from two additional Sega formats. The RetroN 5 3-In-1 Adapter supports Master System games on both card and cartridge, plus Game Gear cartridge games. While owners of the console had been able to play Master System games using an official Power Base Converter, this is a much more compact solution with the added bonus of supporting the handheld format. The RetroN 5 3-In-1 Adapter is priced at $59.99 and is expected to ship at the end of February 2017.



NAMCO FOUNDER PASSES AWAY

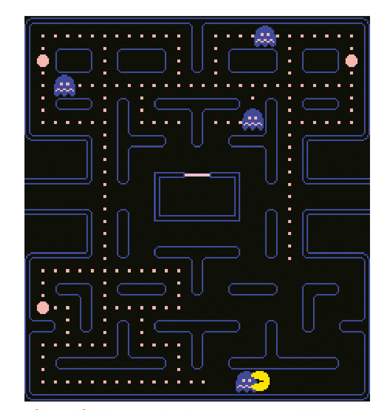
MASAYA NAKAMURA DEAD AT 91

Bandai Namco has confirmed the passing of Masaya Nakamura, who founded Namco in 1955. Nakamura was 91 years old when he passed away on 22 January.

Having been educated in the ship-building department of Yokohama Industrial College, Nakamura had an engineering background when he founded Nakamura Manufacturing in the Fifties. With videogames some way from existing in the consumer market, the company initially stationed wooden horse rides on the rooftop of a Yokohama department store. After a few years, the company was renamed Nakamura Amusement Machine Manufacturing Company, which would be shortened to the current Namco brand in the early Seventies.

Namco would enter the videogame market through the purchase of Atari's failing Japanese subsidiary in 1974. Nakamura had scared away competition with a massive bid of $800,000 and ultimately paid $500,000 for the company. Namco began to introduce its own products in the late Seventies beginning with *Gee-Bee*, and soon had a string of hits including *Galaxians*, *Pac-Man*, *Dig Dug* and *Pole Position*.

Nakamura remained active in Namco until shortly after its 2005 merger with toy giant Bandai, becoming an honorary advisor in June 2006. In 2007, the Japanese government awarded Nakamura the Order Of The Rising Sun, gold rays with rosette, for his contributions to industry. Our thoughts are with Masaya Nakamura's family and friends.



» [Arcade] Nakamura's business sense ensured hit games like *Pac-Man* quickly became hit franchises.



» [Arcade] *Pole Position* is one of the first games to feature product placement from companies like Pepsi and Canon.

TOTALLY RECALLED

FORGOTTEN SPECTRUM SCHWARZENEGGER MOVIE LICENCE UNEARTHED

Former Ocean artist Mark R Jones has managed to release a playable version of an unreleased *Total Recall* game for the ZX Spectrum. The game, a licensed product based on the Arnold Schwarzenegger film, was being worked on by a developer called Active Minds. However, this unsatisfactory version of the game was scrapped and a new version written in-house at Ocean.

While no playable builds of the Active Minds version of *Total Recall* had ever been released to the public, a Spanish magazine called *Micro Hobby* had hosted a rolling demo of the game on its cover tape in 1990. With the help of Adrian Singh, keyboard control was re-enabled in this demo, allowing players to experience the game for themselves 27 years after the code was released. The game is evidently unfinished and prone to crashing, but it remains a fascinating curiosity for the ZX Spectrum community as well as fans of Ocean and *Total Recall*.



» [ZX Spectrum] A glimpse of the *Total Recall* game that never was.

NES/Famicom: A Visual Compendium

This hefty and beautifully-presented tome is a great tribute to the art and design of Nintendo's 8-bit hardware, with a mixture of in-game pixel art, cover art and hardware photography making up the focus of the book's content. There's also interesting interview content from the likes of John Pickford, David Wise, and Kevin Bayliss. Hardback and softcover versions are available.

Price: £24.99+ **From:** www.bitmapbooks.co.uk

The Revenge Of Shinobi Vinyl Soundtrack

Sega's classic ninja platformer is well-loved for a variety of reasons, with Yuzo Koshiro's incredible soundtrack ranking high amongst them. This LP features all of your favourite ninja-slaying tunes, and the usual Data Discs treatment with some excellent art prints featuring enemy illustrations and the artwork, as well as exclusive liner notes from Yuzo Koshiro himself.

Price: £19.99 **From:** www.data-discs.com



PICK OF THE MONTH

Retro Freak

This multi-format retro console is the most versatile one we've seen so far – as standard, it can play NES/Famicom, SNES/Super Famicom, Game Boy, Game Boy Color, Game Boy Advance, Mega Drive/Genesis, PC Engine/Turbografx and Supergrafx games. That's impressive, but what's more impressive is that the console can install your games. The main unit can then be detached from the bulky cartridge adapter, allowing you to take a tiny console to a friend's house with your games library intact. For those of you wishing to play homebrew and translation patches, the system also comes with an SD card slot. The emulation software itself is on par with that used in the RetroN 5.

Price: £169.99 **From:** www.funstockretro.co.uk

Game Genie NES Book

If your Game Genie code book has fallen to pieces or just got lost over the years, you might be lacking a handy reference guide to keep nearby as you play. Well, fret no more! With this no-frills code book you'll be able to beat *Battletoads* with your sanity intact. There's even space at the back for your own additions.

Price: £3.99
From: www.amazon.co.uk

The Amiga Years: From Bedrooms To Billions (Special Edition)

This documentary film looks back at the legacy of Commodore's Amiga computer line, and how its impressive multimedia capabilities reshaped the videogames industry, through archive footage and newly-shot interviews. The special edition version includes a second disc with three hours of interview footage from the likes of Eric Chahi, Trip Hawkins, Ron Gilbert, Mev Dinc and Chris Huelsbeck.

Price: £12.99+
From: www.funstockretro.co.uk

Here's my bio... Paul Rose
Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser*. These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.

Ninten-whoa!

I never owned an NES. The closest I ever got to one was pawing at a R.O.B. in Harrods on a family trip into London. My parents had already bought me an Atari ST for Christmas, so there was no question of getting one of these too, however loudly I purred.

I'd had a bunch of Game & Watch systems, and I'd played the likes of *Donkey Kong* in the arcades, but it wasn't until the Game Boy that I owned a bona-fide Nintendo console. Despite the mocking of an Atari Lynx-owning friend (oh don't worry; he soon changed his tune), I – like most of us – fell in love with it.

By this point, the NES had all but faded away, and the Sega Mega Drive was where I was at, but I never quite let go of feeling like I'd been offered a ticket to Woodstock… and had turned it down because I was getting my hair done that day.

I mean, I was a ZX Spectrum owner, but through friends I'd played on most of the other games systems of the Eighties, and we'd had an Atari VCS (or 2600) back in the day. The NES, though, felt like something significant passed me by, and it was a feeling that I never managed to shift. I had a NES-shaped gap in my knowledge of gaming history, and it bled like an open wound.

I'd filled in some of the gaps in the intervening years. I played the heck out of *Super Mario All-Stars* on the SNES. I'd downloaded various NES games through the Nintendo Virtual Console, and played a few through the miracle of emulation, but there was still something lacking.

Which is why I'm happy to report that the NES Mini – or Nintendo Classic Mini to give the system its actual name – is such a beautiful experience. It's one thing to play a classic game through emulation, or on a different system, but without the hardware it can only be part of the experience.

Alright, admittedly, the NES Mini is a fraction of the size of the original, but having the dinky little device under my telly, and getting to play those games using the original controller, and even being able to play the games via a simulated CRT display, almost completely fills that void in my gaming education.

The 30-game library that's stuffed under the bonnet gives a fantastic overview of the NES history. Thanks to the NES Mini I've finally played the first two *Zelda* games, the NES versions of *Ghosts N' Goblins* and *Donkey Kong*, *Kirby* – and more. It's everything I'd hoped, and wanted, the NES experience to be.

There's a reason why Nintendo's approach to game design heralded as the most pure of all time. 30 years after many of these games were first released, the craftsmanship – from gameplay to graphics – remains intact. These games remain playable in exactly the same way you can listen to a classic song from decades ago. How many other games of that era can you say the same about?

Nintendo is often lambasted for relying too heavily on its own heritage, but why would you throw away what wasn't broken in the first place? Does the new Bruno Mars album replace, say, the entire output of Nick Drake, or David Bowie? Why should games be any different? *

> "I had a NES-shaped gap in my knowledge of gaming history and it bled like an open wound"



What do you think?

Do you agree with Paul's thoughts? Contact us at:

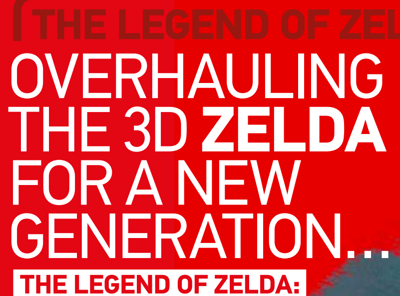
RetroGamerUK @RetroGamer_Mag darran.jones@futurenet.com


Moonoids
The Moon Liberation Army have captured representatives of the earth federal government and have imprisoned them in prison bases on and under the moon surface. There are no guards in the prisons but be wary of the enemy bases and craft that want nothing better than to dispose of you.
Rescue the prisoners and destroy the enemy.
Coming soon:
Join the steam community then go to this link feedback welcome.
https://goo.gl/4c1XfV
by Charles Swires



SWITCHED ON TO HISTORY

As the company with the longest heritage in gaming hardware right now, it's not surprising that Nintendo is using a whole host of titles with retro appeal to promote its brand-new Switch console – take a look at the ones announced so far…



THE LEGEND OF ZELDA

OVERHAULING THE 3D **ZELDA** FOR A NEW GENERATION...

THE LEGEND OF ZELDA:
BREATH OF THE WILD

Open World
■ From the plains to the mountains, Hyrule is wide open and ready for exploration – if you can see a location, Link can visit it, although he might need to develop his stats before he can do so.

Versatile Items
■ Link will have to improvise to make it through *BOTW*. Lighting fires with tree branches might sound standard, but cooking apples and sliding on shields is new.



In Full Voice
■ For the first time ever in a mainline *Zelda* game, major characters will receive voice acting in cutscenes. Fear not, though – the traditionally mute Link will remain voiceless, as always.

Bad Breaks
■ Forget a sword and a green tunic – Link needs to scavenge everything at the beginning of the game, clothing himself in rags and fighting with easily-broken tree branches.

High Energy
■ Link's moveset has undergone an overhaul – the much-loved roll has disappeared, but Link can sprint and climb rocky surfaces. Take note, though, these can deplete his energy.

STREET FIGHTER

THERE'S STILL FIGHT IN IT YET

ULTRA STREET FIGHTER II:
THE FINAL CHALLENGERS

While *Street Fighter II* was never a Nintendo exclusive, the game was always at its most popular on the SNES – and nostalgia for those days has driven a new version for the Switch. You can choose to play with the classic graphics or the HD visuals of 2008's *Turbo HD Remix*. New additions include the Dramatic Battle two-on-one mode, familiar to players of the *Street Fighter Alpha* series, as well as Evil Ryu and Violent Ken, the latter originating from *SNK vs Capcom: SVC Chaos*.





SONIC THE HEDGEHOG

A NEW ERA FOR SONIC

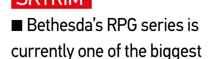
SONIC MANIA / PROJECT SONIC 2017

There was once a time when Nintendo couldn't stand the sight of Sega's blue hedgehog, but the mascot's new outing, *Sonic Mania*, is all the better for revisiting those days of bitter rivalry. The game is a 2D platformer in the same mould as the Mega Drive classics, featuring a mixture of new stages and remixed oldies. We've been able to try the game and it looks and feels spot-on in both new and old zones, so we're hoping that quality is maintained. *Project Sonic 2017* is also confirmed for the Switch, but Sega has revealed little about the game.

ALSO ON THE WAY...

The retro love runs deep on Nintendo Switch, as these releases show...

THE ELDER SCROLLS



THE ELDER SCROLLS V: SKYRIM



■ Bethesda's RPG series is currently one of the biggest names in gaming, and boasts a heritage going back over two decades to the 1994 PC game *The Elder Scrolls: Arena*. The Switch will receive a version of 2011's *Skyrim*, the only game released this decade to make the top 20 of issue 150's reader-chosen list of the best games of all time.

CONSTRUCTOR

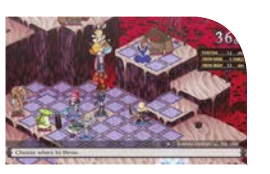
CONSTRUCTOR



■ System 3's real-time strategy construction simulation is 20 years old this year, and an updated HD version is on the way for a variety of platforms, including the Switch. As always, your goal is to monopolise the local construction industry by building facilities and residential properties while plaguing rival developers with socially undesirable types like hippies and gangsters.

DISGAEA

DISGAEA 5 COMPLETE



■ This strategy RPG series has been a cult hit since it first launched on the PS2 back in 2003, known for ridiculous statistics, a keen sense of humour and the Prinny creatures that serve as a series mascot. The Switch game is an enhanced port of the latest sequel *Disgaea 5: Alliance Of Vengeance*, which launched for PS4 in 2015.

WONDER BOY

THE DRAGON'S TRAP / MONSTER BOY AND THE CURSED KINGDOM



■ The classic adventure platform series has been revived following its 30th anniversary! DotEmu and Lizardcube have confirmed that *The Dragon's Trap: Wonder Boy*, a remake of the Master System classic *Wonder Boy III*, will be coming to the Switch. FDG Entertainment has series creator Ryuichi Nishizawa on board for a spiritual successor title *Monster Boy And The Cursed Kingdom*, also coming to Nintendo's new console.

RAYMAN

RAYMAN LEGENDS: DEFINITIVE EDITION



■ Ubisoft's own platform mascot has been a mainstay of the gaming scene since the mid-Nineties, and the 2013 2D platformer *Rayman Legends* was one of his very finest outings. The Switch is getting an updated version of the game featuring unspecified 'new and exclusive' content, and Ubisoft has said the game will take full advantage of the unique Joy-Con controllers.

MARIO KART

EIGHT REASONS TO HIT THE RACETRACK

MARIO KART 8 DELUXE

One of gaming's most popular spinoff series will be making an early debut on Switch, but for the first time ever it'll be an enhanced version of a previous release – specifically the Wii U's *Mario Kart 8*. Here's what you can expect to see from the new version…

1 **A variety of multiplayer options – four player split-screen, eight-player wireless play and up to 12-player races online.**

2 All 32 *MK8* tracks plus 16 DLC tracks, for a total of 48 tracks. 23 of these are tracks from the first seven *Mario Kart* games.

3 **The 30 *Mario Kart 8* characters plus the six DLC racers, as well as five brand-new racers for *Deluxe*.**

4 Three new vehicles added to the existing *Mario Kart 8* vehicles, two of which take their inspiration from *Splatoon*.

5 **A Battle Mode similar to that featured in classic *Mario Kart* games, with a mix of new and old maps to fight on.**

6 Items include the returning Boo (in races) and the Feather (in battles), and up to two can be held at once.

7 **A new smart steering feature to assist novice players, even in the game's highest difficulty mode of 200cc.**

8 Upgraded visuals running at 1080p and 60 frames per second on a TV, with 720p presentation on the Switch screen.

DRAGON QUEST

SCRATCHING THAT RPG ITCH

DRAGON QUEST HEROES I & II / DRAGON QUEST X / DRAGON QUEST XI



This Japanese RPG series has been enormously popular in its home country since its Famicom debut in the Eighties, so it's no surprise to see it strongly represented on the Switch, with three planned games announced already. The first of these is a compilation titled *Dragon Quest Heroes I & II*, comprising both the hack-and-slash games developed by *Dynasty Warriors* developer Omega Force, which has been announced as a launch day release in Japan.

Also on the horizon, there are versions of mainline titles, *Dragon Quest X* and *Dragon Quest XI* headed to Switch. *Dragon Quest X* is an existing MMORPG entry in the series, which has already made its way to several other platforms including 3DS, Wii, Wii U, PS4 and PC, but hasn't yet received an English release anywhere. The forthcoming traditional RPG *Dragon Quest XI* is also in development for Switch, alongside versions for the 3DS and PS4, and is scheduled for release this year.

TETRIS

FRANCHISES THAT…

PUYO PUYO TETRIS

Alexey Pajitnov's classic puzzler didn't originate on the Game Boy, but Nintendo's handheld proved to be a natural home for it, selling over 35 million copies. On the Switch, it'll debut as part of the crossover puzzle game *Puyo Puyo Tetris*, which offers players the chance to play using the rules of either game or both. Standard matches see players choosing one style or the other, Swap matches require you to alternate between playing both until you fail at one, and Mix play has you dropping both Puyos and tetrominoes into the same playfield.





PUYO PUYO

…FIT TOGETHER

PUYO PUYO TETRIS

***Puyo Puyo* made its debut in 1991 as a spinoff game from Compile's Japanese RPG series *Madou Monogatari*, and has** been owned by Sega since the late Nineties. It's coming to the Switch as part of *Puyo Puyo Tetris*, which features two brand-new modes: Big Bang and Party. The former challenges players to clear set formations in either Puyo or Tetris modes, with the goal of generating as much damage as possible within a time limit, while the latter game mode is a score attack battle mode that spices up the action with a selection of power-up items.

SUPER MARIO BROS.

FIVE THINGS ABOUT **MARIO'S** NEXT PLATFORM ADVENTURE

SUPER MARIO ODYSSEY



It's A Sandbox Game

■ What we've seen of *Super Mario Odyssey* suggests that it's the most open *Mario* adventure so far – the levels look to be enormously expansive.

Mario Meets The Everyman

■ In the realistic-looking New Donk City, Mario can mingle with other humans, most of whom he stands waist-high to! There are also regular cars and buildings.

Looking Back For Inspiration

■ In interviews about *Odyssey*, Shigeru Miyamoto has stated that the game is taking inspiration from the earlier 3D *Mario* games, such as *Super Mario 64*.

Plumber's Got A Brand-New Hat

■ Unlike his previous caps, we've seen Mario throw his new hat into the air to use as a platform already – what else could it do?

All-Terrain Hero

■ So far we've seen Mario in realistic cities, a Mexican-themed desert stage, a forest and even a world of crystals, suggesting that *Odyssey* is going to be diverse.

BOMBERMAN

RETURNING WITH A BANG

SUPER BOMBERMAN R



Ever since Konami bought full control of Hudson Soft, poor old *Bomberman* has been left out in the wilderness – if you exclude games on iOS and Android, he hasn't been seen since 2010's *Bomberman Live: Battlefest* on Xbox 360. Now he's back in *Super Bomberman R*, an entirely new game which revives the classic maze battle formula that made the series famous in the Eighties.

Super Bomberman R features a story mode with 50 stages that can be tackled both alone and co-operatively, with boss battles and voice acting. However, the real heart of *Bomberman* has always been in the franchise's multiplayer battles, and the game will offer both local and online battles for up to eight players. All the traditional power-ups, including multiple bombs, speed boosts, bomb kicking and bomb range extensions, return too, meaning that the experience will be very familiar to any long-term fans of the series.

ALSO ON THE WAY...

Even more retro love for the Switch, including some Japan-only games

SYBERIA

SYBERIA III



■ Microids' adventure series dates back to the early Noughties, originally appearing on PCs in 2002 and PS2 and Xbox in 2003. The new game in the series follows protagonist Kate Walker's travels across Europe, encountering tribes and snow ostriches.

NOBUNAGA'S AMBITION

NOBUNAGA'S AMBITION: CREATION WITH POWER UP KIT



■ This Japanese historical strategy series dates back to 1983, and was originally written wholly in BASIC! The Nintendo Switch version is a conversion of the latest game in the series, originally released during 2013 in Japan and 2015 in the West. No Western release has been confirmed for the Switch version.

FIRE EMBLEM / DYNASTY WARRIORS

FIRE EMBLEM WARRIORS

■ Following the success of *Hyrule Warriors*, a Wii U and 3DS game which applied the hack-and-slash gameplay of Koei Tecmo's *Dynasty Warriors* series to the world of *Zelda*, Nintendo has given the green light for *Fire Emblem* to receive a similar crossover treatment. The game will also be available for the enhanced New Nintendo 3DS.

SPELUNKER

EVERYONE IS CRAZY! SPELUNKER



■ Japanese gamers have had a soft spot for *Spelunker*'s famously fragile subterranean explorer ever since his Eighties debut, and he's coming to the Switch in a new game. This is based on the free-to-play digital PS4 game *Spelunker World*, featuring 3D visuals and multiplayer for up to four players, but will be a paid-for game available physically and digitally.

VARIOUS

ARCADE ARCHIVES



■ This retro download range is making its way over from the Xbox One, PS4 and PC, and will initially feature games from SNK's popular Neo-Geo MVS board. *King Of Fighters '98* is the first planned title, followed by *Waku Waku 7*, *Shock Troopers*, *World Heroes Perfect* and *Metal Slug 3*.



BACK TO THE NOUGHTIES

JANUARY 2000 – As computers around the world fail to explode, evil takes up new residences, and Lara Croft continues to rule the world while Core's Fighting Force falls flat. Nick Thorpe rings in the new millennium…

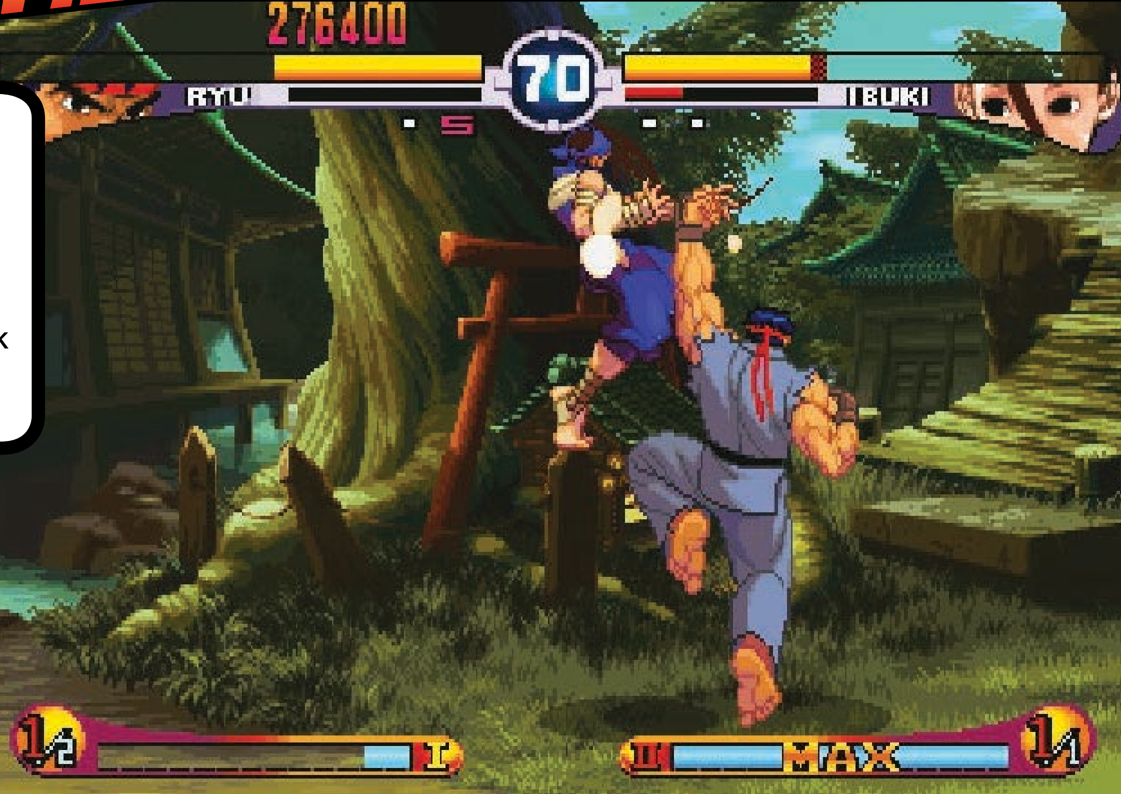


NEWS JANUARY 2000

The announcement of a huge corporate merger was the talk of the world at the start of 2000, and it was appropriately high-tech for the new millennium – America Online (better known as AOL) was set to buy the media giant Time Warner for a record $164 billion. The deal turned sour, as AOL subscriber numbers would start to decline in 2002 as broadband access became more widespread, and the dotcom bubble peaked just days after the move was announced. The merger has since been described as the worst in business history.

A major development in the Algerian Civil War took place on 11th January, as the Islamic Salvation Front formally disbanded, having negotiated an amnesty with the government following a ceasefire in October 1997. The conflict would subside over the next two years as Algerian military forces were able to focus on Armed Islamic Group of Algeria.

The month concluded with a verdict in the trial of Harold Shipman, on 31 January. The doctor was had been charged with 15 counts of murder and a single count of forgery, and was found guilty on all counts. His victims, largely elderly women who were otherwise in good health, were typically killed with a lethal overdoses and had their deaths ascribed to old age.



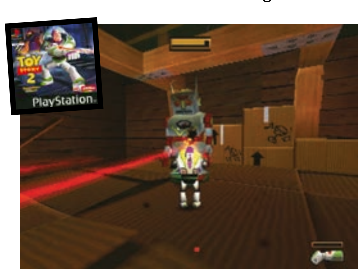
THE LATEST NEWS FROM JANUARY 2000

Despite the fact that the world hadn't experienced its destruction at the hands of the Millennium Bug, the gaming world was obsessed with a catastrophe – specifically, the one going on in Raccoon City. PlayStation owners were gearing up for *Resident Evil 3: Nemesis*, which featured a returning Jill Valentine trying to escape from the zombie-infested city while being pursued by a mutated super-soldier. Meanwhile, Dreamcast owners were being primed for *Resident Evil: Code Veronica*, which followed Chris and Claire Redfield on an Umbrella Corporation island outpost. Was that enough horror? No. N64 and Dreamcast owners were given conversions of *Resident Evil 2* to enjoy, the original game was coming to Game Boy Color, and Shinji Mikami was talking about a more action-oriented *Resident Evil 4*!

Elsewhere, the big buzz was about the new consoles on the horizon. PlayStation 2 fever was reaching its height ahead of the console's planned launch in March, with new screenshots of big launch games like *Ridge Racer V* and *Tekken Tag Tournament* making their way into magazines. *Oddworld Inhabitants* revealed its new game *Munch's Oddysee* as an exclusive for the new console too, although it would ultimately never appear on it. By way of response Nintendo announced that it was targeting Christmas 2000 as the launch date for its new console, codenamed Dolphin. However, practically nothing was known about the console at this point, other than the fact that it would contain an IBM-manufactured CPU named Gecko.

For PC gamers, the big news was that *Daikatana* was drawing close to release after three years in development. Big things were expected of the first-person shooter, which had John Romero of *Doom* and *Quake* fame at the helm, but the outlook wasn't entirely rosy. *Computer & Video Games* summarised it as "*Quake* and *Half-Life* meets *Hexen* trying to get the best of all worlds," something it considered to be a tall order. It would have major competition, too: John's former colleagues at id Software had just released *Quake III: Arena*, a spectacular multiplayer shooter which received universal acclaim. Also in the first-

[N64] *Fighting Force* wasn't a classic on PlayStation, but the N64 version was a real stinker.



[PlayStation] Traveller's Tales did a good job of *Toy Story 2* – no surprise, as it handled the original game too.



[Dreamcast] Screeching into your home from the arcade, Crazy Taxi brought colourful action and loud tunes.

[PlayStation] Would *Nemesis* prove to be Jill Valentine's undoing? *Resident Evil 3* would reveals all…

person shooter market, early images of a PC and Mac game called *Halo* were doing the rounds. That could be a game to keep an eye on in the future…

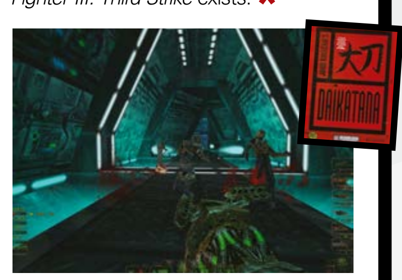
As is traditional following the holidays, new releases were thin on the ground. One of the most popular games of the month was bound to be the kid-friendly film licence *Toy Story 2*, which defied expectations and turned out surprisingly well, just as its 16-bit predecessor had done. *N64 Magazine* awarded the game 71% in an import review, while *Official PlayStation Magazine* gave it 8/10, regarding it as, "A title aimed at kids that doesn't insult adults."

Those looking for more adult fare on their PlayStation were served well with the release of *Medal Of Honor*, EA's excellent first-person shooter set during World War II. *Computer & Video Games* wasn't too keen on the game, awarding it 3/5, but *Official PlayStation Magazine* was bowled over. In a 9/10 review, Dan Mayer called it "more than just an essential first-person shooter." The strong sales that followed convinced EA to do what it did best and turn it into a long-running series, with over a dozen games following over the course of the decade.

While Core Design was enjoying major chart success with *Tomb Raider: The Last Revelation*, its *Fighting Force* series was getting a battering from the press. *Fighting Force 2* retained the combat focus of the original game, but added significant stealth elements and took the game into action-adventure territory. Neither fans nor the press were particularly impressed – *Official PlayStation* gave the game 6/10 and *GamesMaster* awarded it 50%, predicting that it "will be instantly forgotten on release". However, the real kicking was reserved for the original *Fighting Force*, which had just made its way to the N64. Mark Green's review in *N64 Magazine* described the beat-'em-up as "unintentionally hilarious" and advised readers to "avoid it like your life depends on it," giving the game a pitiful score of 26%. The series ended there, although not for want of Core's efforts – a third game did enter development before being cancelled.

Sega's big offering for this brand-new millennium was *Crazy Taxi*, a virtually identical conversion of the popular arcade game. Tasking the player with ferrying people around town to make money, the twist that made the game so popular was that dangerous driving earned major rewards in the form of tips – jumps, slides and near-misses with vehicles were all rewarded by your adrenaline junkie passengers. *Dreamcast Magazine* praised the game's visuals and fast-paced gameplay, awarding the game 94% and describing it as, "The perfect antidote for those race junkies who have become a tad jaded by the de rigueur 'real' driving sims currently jostling for shelf space."

An arcade conversion that received less love from the magazine was the long-awaited *Street Fighter III: W Impact* (*Double Impact* outside of Japan), a collection of the first two arcade releases of *Street Fighter III*. "It's a 2D beat-'em-up and we're sick of 'em," the reviewer moaned, awarding the game 44% and asserting that "even if you are a fan you won't be for much longer." Neither of the games on *Double Impact* see much play anymore – but to be fair, that's only because the excellent *Street Fighter III: Third Strike* exists. *

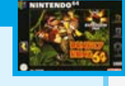


[PC] *Daikatana* was nearing completion after years of frustrating development. Could it meet expectations?



JANUARY 2000

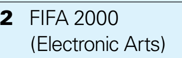
NINTENDO 64



1 Donkey Kong 64 (Nintendo)
2 WWF Wrestlemania 2000 (THQ)
3 Jet Force Gemini (Rare)
4 Super Smash Bros. (Nintendo)
5 Rayman 2 (Ubisoft)

PLAYSTATION

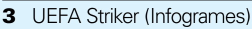
1 Tomb Raider: The Last Revelation (Eidos)
2 FIFA 2000 (Electronic Arts)
3 Dino Crisis (Virgin)
4 Final Fantasy VIII (Sony)
5 Tomorrow Never Dies (Electronic Arts)





DREAMCAST

1 SoulCalibur (Sega)
2 Sonic Adventure (Sega)
3 UEFA Striker (Infogrames)
4 Ready 2 Rumble Boxing (Midway)
5 Sega Rally 2 (Sega)



MUSIC



1 Born To Make You Happy (Britney Spears)
2 U Know What's Up (Donell Jones)
3 Because Of You (Scanty Sandwich)
4 The Masses Against The Classes (Manic Street Preachers)
5 [Welcome] To The Dance (Des Mitchell)

THIS MONTH IN…



Computer & Video Games

The original videogames magazine sported a reader vote of the top 100 games of all time. An interesting list was topped off by *GoldenEye 007*, which beat *The Legend Of Zelda: Ocarina Of Time* and *Final Fantasy VII* to take the coveted crown.



Dreamcast Magazine

Eight full pages were set aside for a look at Tecmo's forthcoming fighting extravaganza *Dead Or Alive 2*, in what *definitely wasn't* an excuse to print full-page images of the fighters in bikinis. Director Tomonobu Itagaki also claimed that Kasumi "is like a Venus to me" – each to their own…



N64 Magazine

The Planet Game Boy section of the magazine had some interesting news about Nintendo's forthcoming Game Boy Advance. The 32-bit handheld, scheduled for release in late 2000, would be able handle perfect conversions of SNES games and even display polygons!

Aztec Adventure

"THE MISSION BELLS TOLD ME THAT I SHOULDN'T STAY"

#110

» SEGA » MASTER SYSTEM » 1987

For those amongst us who remember *Sabre Wulf* or, one of my personal favourites, *Firelord* you'll be in instantly-recognisable (albeit distinctly more poncho-clad) territory with *Aztec Adventure*. This Mexican-themed adventure features a little fellow named Nino who must traverse 11 peril-filled stages to reach a beautiful golden paradise. Within these top-down mazes – filled with various themed objects, such as undergrowth and ancient pots, depending on which stage you're on – are many vicious little blighters who are out to put a stop to your quest. The enemies include strange mask-sporting tribesmen, bats and carnivorous flora that are all out for your skin, *Predator*-style.

Fortunately for poor Nino it's not all bad news, as many of these enemies can be bought off with cash that you pick up after killing certain creatures, and they then become your guides and henchmen aiding you in reaching your golden goal. Not only can you pick up money to throw to potential help, but you can get nifty weapons, such as fire to burn bushes that get in your path, and other armaments. Also you can get other helpful items like boots which help you to cross rivers unharmed.

The graphics are bold, colourful and filled with cutesy characters that might make more hardened games want to cringe a bit, but it all works incredibly well and everything stands out and is in its proper place. The controls are a little stiff-feeling at first but about ten minutes and you'll be roaming the plains and jungles like a true explorer. I love *Aztec Adventure*, it's a nice, innocent adventure with a decent weapons and bartering system to help you along at a comfortable pace – consider that a recommendation! *

LEE TATLOCK

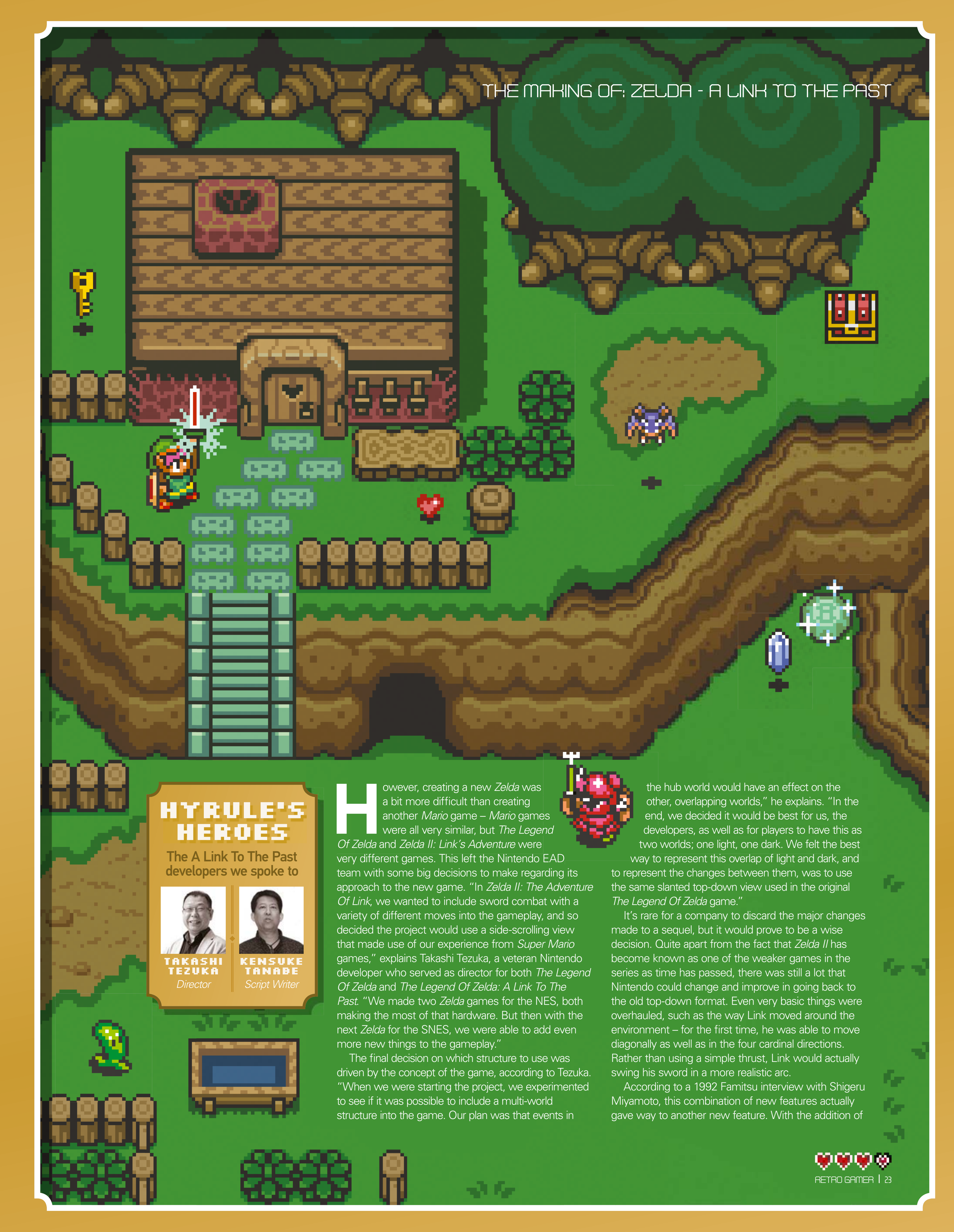




Refreshing a series for a new generation is tough, especially when it's a Zelda title. Nick Thorpe speaks to Takashi Tezuka and Kensuke Tanabe about the hard work that went into this action-RPG classic…

When you look back at the history of the series, *The Legend Of Zelda* occupies a funny space in Nintendo's planning processes. If a *Zelda* game arrives in time for a console launch, it's because the game was heavily delayed on the previous generation of hardware. Yet *Zelda* is never overlooked when a new Nintendo console is being planned – in fact, it's often one of the very first things considered for a new machine. Our first look at *The Legend Of Zelda: The Wind Waker* came before the GameCube had hit the shelves, but the game launched over a year into the life of the machine. A demo of what would eventually become *The Legend Of Zelda: The Ocarina Of Time* was shown to attendees of Nintendo's Shoshinkai 1995 expo, but the game didn't materialise until 1998. But the game that started this tradition was *The Legend Of Zelda: A Link To The Past*, the game that marked Link's move off of 8-bit platforms.

In planning the launch of the 16-bit SNES platform, Nintendo identified two basic software needs: new properties that could demonstrate the power of the new hardware, and more of what had made the NES successful. For the former category, Nintendo chose racing and flight games that would be impossible to achieve on rival consoles, and delivered a one-two punch of *F-Zero* and *Pilotwings* in November and December 1990. For the latter, Nintendo chose to immediately develop follow-ups to its most popular NES properties – the *Super Mario Bros.* and *The Legend Of Zelda* series.



HYRULE'S HEROES

The A Link To The Past developers we spoke to

TAKASHI TEZUKA
Director

KENSUKE TANABE
Script Writer

However, creating a new *Zelda* was a bit more difficult than creating another *Mario* game – *Mario* games were all very similar, but *The Legend Of Zelda* and *Zelda II: Link's Adventure* were very different games. This left the Nintendo EAD team with some big decisions to make regarding its approach to the new game. "In *Zelda II: The Adventure Of Link*, we wanted to include sword combat with a variety of different moves into the gameplay, and so decided the project would use a side-scrolling view that made use of our experience from *Super Mario* games," explains Takashi Tezuka, a veteran Nintendo developer who served as director for both *The Legend Of Zelda* and *The Legend Of Zelda: A Link To The Past*. "We made two *Zelda* games for the NES, both making the most of that hardware. But then with the next *Zelda* for the SNES, we were able to add even more new things to the gameplay."

The final decision on which structure to use was driven by the concept of the game, according to Tezuka. "When we were starting the project, we experimented to see if it was possible to include a multi-world structure into the game. Our plan was that events in the hub world would have an effect on the other, overlapping worlds," he explains. "In the end, we decided it would be best for us, the developers, as well as for players to have this as two worlds; one light, one dark. We felt the best way to represent this overlap of light and dark, and to represent the changes between them, was to use the same slanted top-down view used in the original *The Legend Of Zelda* game."

It's rare for a company to discard the major changes made to a sequel, but it would prove to be a wise decision. Quite apart from the fact that *Zelda II* has become known as one of the weaker games in the series as time has passed, there was still a lot that Nintendo could change and improve in going back to the old top-down format. Even very basic things were overhauled, such as the way Link moved around the environment – for the first time, he was able to move diagonally as well as in the four cardinal directions. Rather than using a simple thrust, Link would actually swing his sword in a more realistic arc.

According to a 1992 Famitsu interview with Shigeru Miyamoto, this combination of new features actually gave way to another new feature. With the addition of

LINK'S ARSENAL

A hero can't get the job done without the right tools…



BOW & ARROW
■ A good ranged weapon, although you have a limited supply of arrows.



BOOMERANG
■ This doesn't just hurt enemies, it retrieves far-off items too.



HOOKSHOT
■ This item can pull Link across dangerous gaps, or grab baddies.



BOMB
■ Does what it says on the tin – place it and run away!



ETHER MEDALLION
■ An enormous blast of lightning fries flying enemies and stuns the rest.



QUAKE MEDALLION
■ A mighty tremor reduces grounded enemies to either nothing or slime.



LAMP
■ Useful for lighting up the game's many dark rooms by igniting torches.



MAGIC HAMMER
■ This versatile tool and weapon is useful against frozen enemies.



CANE OF SOMARIA
■ This is used to instantly create blocks – good for weights and shielding.



CANE OF BYRNA
■ This awesome item shields Link and hurts enemies in the process!



MAGIC CAPE
■ This fashionable item makes Link both invisible and invincible.



MAGIC MIRROR
■ An important item, as it's Link's path between the Light and Dark Worlds

LINK SHRINKS

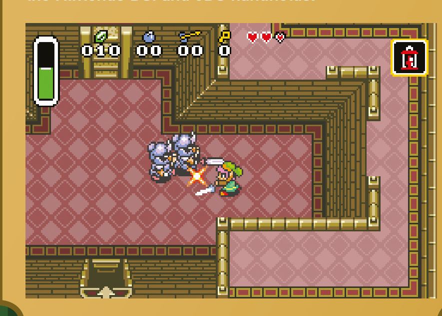
The only port of Link's 16-bit adventure received some major upgrades…



The prospect of SNES-quality games on the Game Boy Advance was one that intrigued gamers around the world, and Nintendo set about making sure that a number of them would be available for dedicated fans, with *The Legend Of Zelda: A Link To The Past* being one of the earlier examples. The game ran at the slightly lower screen resolution of 240x160 (as opposed to 256x224), but received slightly more accurate translation and some minor bug fixes.

However, the game also received a major new mode in the form of the co-operative game *Four Swords*, which allowed up to four players to quest together as various coloured Links using the GBA's Link Cable. If you finished that quest, it was then possible to play through a new single-player dungeon as a reward, facing numerous stronger versions of the Dark World bosses before coming face to face with a surprising final enemy.

Not only did the GBA game sell an impressive 1.8 million units, but *Four Swords* left its own legacy, spawning the dedicated multiplayer GameCube sequel *The Legend Of Zelda: Four Swords Adventures* and the 3DS game *The Legend Of Zelda: Tri-Force Heroes*. *Four Swords* was also rereleased as a limited anniversary edition downloadable game for the Nintendo DSi and 3DS handhelds.

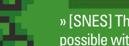


▶ diagonal movement, the Nintendo EAD team had made the logical assumption that Link should be able to attack diagonally, too. However, in practice it actually made the controls feel somewhat worse, and Link was once again saddled with the ability to move in eight directions but face only four. Undeterred, the team found a way to add a multi-directional attack in the form of a spin attack, activated by holding the sword button down for a couple of seconds. This elegant solution would go on to feature in many subsequent *Zelda* games and become a staple of the series.

Other changes to the use of weaponry and items were considered too, according to Tezuka. "At the start of development, we wanted players to be able to freely choose which weapons to hold, not just the sword and shield," explains the game director. "We also thought about having these weapons combine, say for example, having the Bow & Arrows set to the A Button and a Bomb to B Button so that when you use them together (i.e. press both the buttons), Link would shoot an arrow with a bomb attached." This would have revolutionised *Zelda*'s combat system, but ultimately didn't come to pass – however, it might sound familiar to fans of the series. "In the end we didn't use this in *A Link To The Past*, as Shigeru Miyamoto requested that Link always have the sword equipped," Tezuka recalls. "We were able to implement this system in the next title, *Link's Awakening*, though."







Working with the SNES also opened up a world of new possibilities for the Nintendo development team. "The new hardware allowed us to do things we hadn't been able to until that point. I'd only been drawing four-colour pixel images up until then, so even simply just increasing the number of colours available to use to 16 or 256 colours, as well as being able to use high-quality sounds, was really exciting for me," explains Tezuka. "Figuring out how best to effectively reflect the features of the hardware into a game is always a challenge that Nintendo's game designers face, and not limited to this game," notes Kensuke Tanabe, the scriptwriter for *A Link To The Past*. "For me, who'd studied visuals at university, being able to use two 'animation cells' and having the possibility to scroll them separately was a huge deal."

The technique that Tanabe refers to above is that of using multiple background layers. On the NES, it was only possible to draw a single layer of background graphics and a single layer of sprite graphics. With the SNES, developers had the luxury of multiple background layers. For example, in *A Link To The Past*, one layer is used to display the stage layout and a second layer is reserved for special effects. A third layer is used to display the HUD, which never moves. "Using it allowed us to create the raining scene at the very start of the adventure, as well as show sunlight filtering down through the leaves in the forest," Tanabe recalls of the special effects layer. "It's the effect of the sunlight in the forest that I'm particularly fond of. I'm also really pleased that we were able to display which floor a player is on by using two "animation cells". This was actually a suggestion from the engineering team."



» [SNES] The memorable rainy intro to *A Link To The Past* was only possible with the power of the SNES.



MAGIC POWDER
■ This can transform enemies into weak or even helpful creatures!



FLUTE
■ This ocarina-shaped object can summon a bird for fast travel.



PEGASUS SHOES
■ Footwear that allows Link to perform a speedy dash attack.



FIRE ROD
■ Use this to send a burning blast in the direction of your foes.



BUG-CATCHING NET
■ If you want to put a bee or fairy in a bottle, you'll need this.



POWER GLOVE
■ No dodgy NES peripherals here – this lets Link lift some heavy objects.



ICE ROD
■ Freeze the enemy with this vital piece of magical weaponry.



BOOK OF MUDORA
■ This allows Link to read Ancient Hylian, often used in magical places.



FLIPPERS
■ Worth the 500 Rupees the Zora charges, as you'll be able to swim!



BOMBOS MEDALLION
■ Hit everything on screen with fire magic, at great magical cost.



BOTTLE
■ These handy containers can hold potions, fairies and even bees.



MOON PEARL
■ Without it, Link would lose his human form in the Dark World.

"Shigeru Miyamoto requested that Link always have the sword equipped"
Takashi Tezuka



Despite the new possibilities, technical issues were rare. "Our game designers had a pretty good idea of what could be done on the hardware back then, so I don't believe we had any unexpected implementations," Tezuka confirms, though he does note one important exception. "Having said that, though, we had a long battle with the memory size, and I remember very clearly that the engineering team worked extremely hard to optimise it."

Prior to *The Legend Of Zelda: A Link To The Past*, all of Nintendo's first-party SNES games had used a minimal ROM size of just four megabits. Not only did the new *Zelda* require eight megabits of storage, it was pushing that limit. A simple graphical compression routine was brought over from *Super Mario World* to combat this, which saved space by limiting many graphical tiles to eight colours, rather than the standard 16 that the SNES is capable of. With data duplication cut to an absolute minimum, the game was able to fit into the ROM allocated. Even then, translating the game from Japanese once again challenged this limit. In his 1992 *Famitsu* interview, Miyamoto explained that the original plan was to use a higher capacity cartridge for the translated game, and use what extra space remained afterwards to make some improvements to the Western releases. However, further compression rendered increased capacity unnecessary.



» [SNES] The dastardly wizard Agahnim has got Zelda, and now he's zapping her into the Dark World!

The 16-bit versions of both *Mario* and *Zelda* had entered development at the same time, but while *Mario* stuck to its planned trajectory and made it out for the November 1990 launch of the console, *Zelda*'s planned arrival in March was going to be impossible. In fact, by the time that eager gamers in Japan were trying out the new Super Famicom for the first time, Nintendo EAD was only just confident of the game system it had settled upon! The next step was to add the additional staff to complete the work by adding in enemies, a scenario and more. In an interview for the official *Super Mario World* guide book in Japan, Miyamoto estimated that the game would be completed by Children's Day (May 5th) in 1991 in anticipation of a summer release, but this turned out to be an underestimation. According to Miyamoto's 1992 Famitsu interview, implementing these final features took about eight months, pushing the game back further from summer to winter.

If there's any reason that *A Link To The Past* took longer than expected, it might well be because of how much attention was paid to the plot of the game. Right from the start, it was clear that it would be told in more detail and with greater dramatic flair than the NES *Zelda* games were capable of, and that item acquisition would be closely tied to story progression. A clear example of this comes in the game's opening sequence – by contrast to the earlier games, the SNES game offered a far more structured introduction to Link's quest. "In *A Link To The Past*, the game starts with a dark, rainy scene, with Link being just a regular village boy who, in the same situation as the player, doesn't really know what's going on, but just follows Princess Zelda's voice and works to save her. However, in doing this he somehow ends up becoming an outlaw. We wanted players to start feeling excited and wonder what will happen next," explains Tezuka. It's a dramatic opening, but finding and rescuing the princess so early on definitely surprised some players, who felt that the game was going to end quite suddenly. "We didn't intend to make players feel like the game was going to end there," admits Tezuka, who always saw Link's ascension to heroism in a rather different way.



» [SNES] The moment when Link gains the Master Sword is a pivotal and iconic scene in the game.

The previous games had just dropped the player into the world and allowed them to get on with it, but this would not be an approach that would be repeated in *A Link To The Past*. "We didn't have Link start out as a sword-wielding hero right from the start, because we had already decided at the beginning of the project that we wanted him to awaken as a hero when he pulls out the Master Sword," explains Tezuka. "We did

▶ make a number of adjustments to the placement and ordering of the weapons and items so that we could get the ideal flow for the game, no matter the player or play style," he continues. Instead of starting out as a bona-fide hero, Link would acquire a variety of items over the course of the game and experience his development naturally. "We thought that players would form an emotional connection with Link as they play and by the time he ultimately becomes a hero, it would just be natural that he can use a variety of different weapons," Tezuka confirms.

Of course, the most memorable weapon to be introduced in *A Link To The Past* was the Master Sword, a blade that has endured over the decades as a key piece of the *Zelda* mythology. As Tezuka alluded to earlier, the scene where Link gains this piece of equipment was one of the most crucial parts of the project. "Kensuke Tanabe already had an idea for a truly memorable hero-awakening scene when we started this project," recalls the director, crediting the script writer for the idea. "In the midst of a forest, with light filtering down through the leaves, the sword stood waiting for someone worthy of wielding it to arrive (the illustration on the Japanese package shows this). Link draws the sword out as the light trickles through the leaves."

In order to draw the sword, one needs to have both inherited the blood of the family of knights who protect Princess Zelda, as well as possess the three pendants. From the moment Link pulls the sword out, it recognises him as a hero, and grants him its power," says Tezuka, with his accurate recall of the plot standing as testament to the importance with which it was treated. The Master Sword was also given its mythological importance at this early stage, as Tezuka recalls: "We also decided then that the Master Sword was a sword that alone holds the power to repel evil, and I suspect this is why it continues to carry such an important role in the rest of the series."

However, the Master Sword scene isn't just symbolic. "It's at this point that the game's real battle starts," the director notes. "Our main aim was to show the birth of a hero in a scene fitting of *The Legend Of Zelda*, and overlap this with a sense of achievement for the player that they have been recognised as a hero after having overcome many challenges." Instead of being a moment of triumph, it's a turning point which ultimately leads to the introduction of the game's dual world concept. "What we had decided on from the start was that Link would first become a hero in the Light World and defeat the first boss," says Tezuka. "From that point is when his battle to defeat the real enemy, Ganon, in the Dark World begins."

The Legend Of Zelda: A Link To The Past was released on November 21st 1991 in Japan, with North American and European releases following on April 13th 1992 and September 24th 1992 respectively. No matter where you were in the world, the game was regarded

BOSS RUSH

While many foes stand in Link's way, these bosses are easily the deadliest dozen…



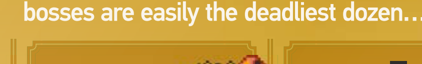
ARMOS KNIGHTS

■ These six knights attack in a regimented formation, no matter where they're pushed in combat. When they attack in a full row, make sure to slow one knight down with arrows to break the line.



LANMOLAS

■ It's hard to predict the movements of this trio of burrowing sandworm-like enemies. Their heads are their weak points – the sword is effective, but try arrows or the ice rod if you need distance.





MOLDORM

■ This nasty piece of work likes to push you off the stage onto the floor below, which resets the battle completely. Try your hardest to avoid being hit as you swing your sword at its tail, which is its weakness.



AGAHNIM

■ The wizard behind Zelda's kidnap looks unthreatening, but wields potent magic attack spells. Some of these can be reflected back by swinging the Master Sword, so get ready to return service!



HELMASAUR KING

■ This fiery-tempered individual will give any self-proclaimed heroes a warm welcome with his hot breath. To cool him off, first smash his mask with the hammer and then hit him with the sword until he's dead.



ARRGHUS

■ This floating foe is a tricky one to hit, and brings an entourage of meanies with it. Pull away the smaller Arrgi with the Hookshot, and then get to work with the sword when Arrghus crashes to the floor.



> **“Our main aim was to show the birth of a hero in a scene fitting of a Zelda [game]”**
> Takashi Tezuka

as an instant classic. Critical praise was unanimous – *Computer & Video Games* awarded the game 89%, noting that “the elements of strategy and adventure are added treats rather than annoying extras.” A review in *Mean Machines* scored the game 95% and declared it “simply the greatest exploration/adventure game available for a console,” while *Super Play Gold*’s 93% review noted that “you’re unlikely to want to switch the game off”. The game sold a massive 4.61 million copies on the SNES, and ultimately spawned both a successful rerelease on the Game Boy Advance as well as a successor for the Nintendo 3DS, *The Legend Of Zelda: A Link Between Worlds*.

Despite the excellent quality of *The Legend Of Zelda: A Link To The Past*, it would ultimately prove to be the end of the line for the *Zelda* series as players had known it, as the series was about to undergo a radical change. The next mainline sequel was *The Legend Of Zelda: The Ocarina Of Time*, which transformed the series with open 3D spaces and more. While smaller 2D *Zelda* games would continue to appear on the Game Boy platforms, including the excellent *Link’s Awakening*, *Oracle Of Ages And Oracle Of Seasons* and *The Minish Cap*, there was never another 2D Zelda game to get the big budget treatment that *A Link To The Past* received.

But that’s not to say that *A Link To The Past* hasn’t had a lasting influence, not by a long shot. Elements from the game including the spin attack, the Hookshot and the Master Sword have become series regulars, and that dual-world concept has been revisited very frequently – just look at young Link and adult Link in *Ocarina Of Time*, or human Link and wolf Link in *Twilight Princess*. The third *Zelda* game is as tightly woven into the legacy of the series as any of the other major entries.

Ultimately, *The Legend Of Zelda: A Link To The Past* is one of those rare games that not only achieved critical and commercial success, but has stood the test of time and continues to attract new fans today. How does the team feel about this sustained success? “We’re truly thankful, and consider it a great privilege,” Tezuka says, but he’s careful not to rest on his laurels. “At the same time, it also drives us to create new games that will surpass this acclaim.” ★

» [SNES] Soldiers take pig form in the Dark World, and you won’t see any other humans.



» [SNES] Climbing the mountain to Hera Tower is dangerous, thanks to a constant rain of rocks.

I AM ERROR…

The story behind one of gaming’s most infamous secrets…

Back in the early Nineties, we can’t imagine many American kids turning down the chance to get their name featured in a NES game. With that in mind, a contest ran in *Nintendo Power* during 1990, allowing the winner to win just that prize. The eventual winner was a chap named Chris Houlihan, whose name was eventually incorporated into not a NES game, but a SNES game – *The Legend Of Zelda: A Link To The Past*.

Of course, there was a catch. There’s every chance that you might have missed that young Nintendo fan’s crowning moment of glory, as Chris Houlihan’s secret room only appears as an error handling measure – if the game can’t determine Link’s next destination, he ends up in this Rupee-filled room and exits to his own house. Plus, if you played the game in any language other than English, Chris Houlihan’s name is nowhere to be seen!





MOTHULA

■ Not only does Mothula move erratically around the stage, it fights you in a room with moving floors. If you’re struggling to get close enough for the sword to hit, blast it from afar with the Fire Rod.



BLIND THE THIEF

■ This photosensitive thief disguises himself as a maiden before revealing his true formidable form. There’s no clever strategy here – hit him with the sword and avoid his floating heads and projectiles.



KHOLDSTARE

■ There’s a frosty atmosphere in this boss fight, and Link will slide around easily. Melt its icy shield with a fire attack (the Bombos Medallion works well), before finishing it with the sword or Fire Rod.



VITREOUS

■ The slime that this gaggle of eyeballs lives in is both disgusting and deadly to touch! Slice down each smaller eyeball as it launches itself at you, before taking out the biggest one from afar with the bow.



TRINEXX

■ Three heads are deadlier than one, as far as this boss is concerned. Stun the red head with the Ice Rod and the blue head with the Fire Rod before attacking, then finish Trinexx off by hitting the glowing orb.



GANON

■ The biggest of big bads, Ganon is the swine behind this whole evil scheme. To finish him off, make sure the room is brightly lit, hit him with the sword to stun him and shoot him with a silver arrow.





Here's a look at the key locations Link will visit as he becomes a hero in the Light World…



LOST WOODS

■ This is where you'll find the Master Sword, truly awakening Link as a hero. But you'll need three pendants to claim it…

HERA TOWER

■ Atop the mountain, this fortress guards the final pendant you'll need to obtain the Master Sword. You'll need the Moon Pearl located here, too.



HYRULE CASTLE

■ This is where Princess Zelda is being held at the beginning of the game, and where you'll later fight Agahnim. The boomerang can be found here, too.



KAKARIKO VILLAGE

■ Most of the residents of the town here are terrified of Link, and some will summon guards to attack him. You can grab a bug-catching net here.



DESERT PALACE

■ The power glove here is key to lifting heavy rocks, which you'll need to do to claim the second pendant.



ZORA'S DOMAIN
■ Make sure to bring some cash with you here, as you'll be able to pick up some useful flippers that allow Link to swim.

EASTERN PALACE
■ You can grab the all-important bow here, as well as collecting your first pendant. You'll have to fight for it, though!

SAGE'S HIDEOUT
■ The man who'll set Link on his path to heroism is taking refuge from the forces of evil here, and is holding onto the Pegasus Boots for you.

LAKE HYLIA SECRET CAVE
■ This remote cave holds a particularly useful item, the Ice Rod – it's worth the big detour to claim it as soon as possible.

LINK'S HOUSE
■ This is where you'll start your quest, and where you'll often resume it. You can pick up the lantern here at the very start of the game, too.

» PUSHING THE LIMITS

Savage

» **PLATFORM:** VARIOUS
» **DEVELOPER:** PROBE SOFTWARE
» **RELEASED:** 1987

David Perry revisits his port of the hardcore action game that stretched the Amstrad CPC's capabilities

Poor ports were so prolific on the Amstrad CPC that many non-owners would simply write the system off. While even standard things like scrolling could often be an issue for Lord Sugar's machine, it was quite capable in the hands of developers who knew what they were doing.

"I think most developers were happy to just make their game on Amstrad, and we were too," comments David Perry, who coded the Amstrad version of *Savage* and is a believer in pushing the power of systems. "Towards the end of our 8-bit careers we started really swinging for the fences," he continues. "The last game we made for the Spectrum was called *Extreme*, and we were finally able to say, 'That's about all we can get out of that device.' I remember always running out of RAM on the Amstrad and would look for absolutely any space remaining."

Savage was one example where David and Probe 'swung for the fences' on the Amstrad – it was doing all sorts of clever tricks (decent scrolling being one notable offering) that were often seen as beyond the machine's capabilities. "*Savage* was a weird idea," continues David. "Nick Bruty and I had made *Trantor: The Last Stormtrooper* with a large animated hero and so we wanted to do that again with *Savage*, the problem was there would be no room in the Amstrad for the other levels, so we decided to make three separate games for the three ideas we had. You'd play as a giant hero, travel through a 3D landscape and then play as a bird – three games in one. We just *loved* really hard technical challenges and *Savage* was the result."



While it could be argued that *Savage* is too difficult for its own good, there's no denying that it remains a spectacular-looking title. David is in agreement of the technical skill on display, "We had no idea how to make a Amstrad do real 3D, so we just brute-forced it, and that took every trick in the book to keep the frame-rate sensible."

The game was well received upon release, and it's interesting for David to see so much interest in the game still. "It's just fun to see what we used to be amazed by, back then it was '*Wow*!'" We'd argue that his games still contain that 'wow' factor some 30 years on. *



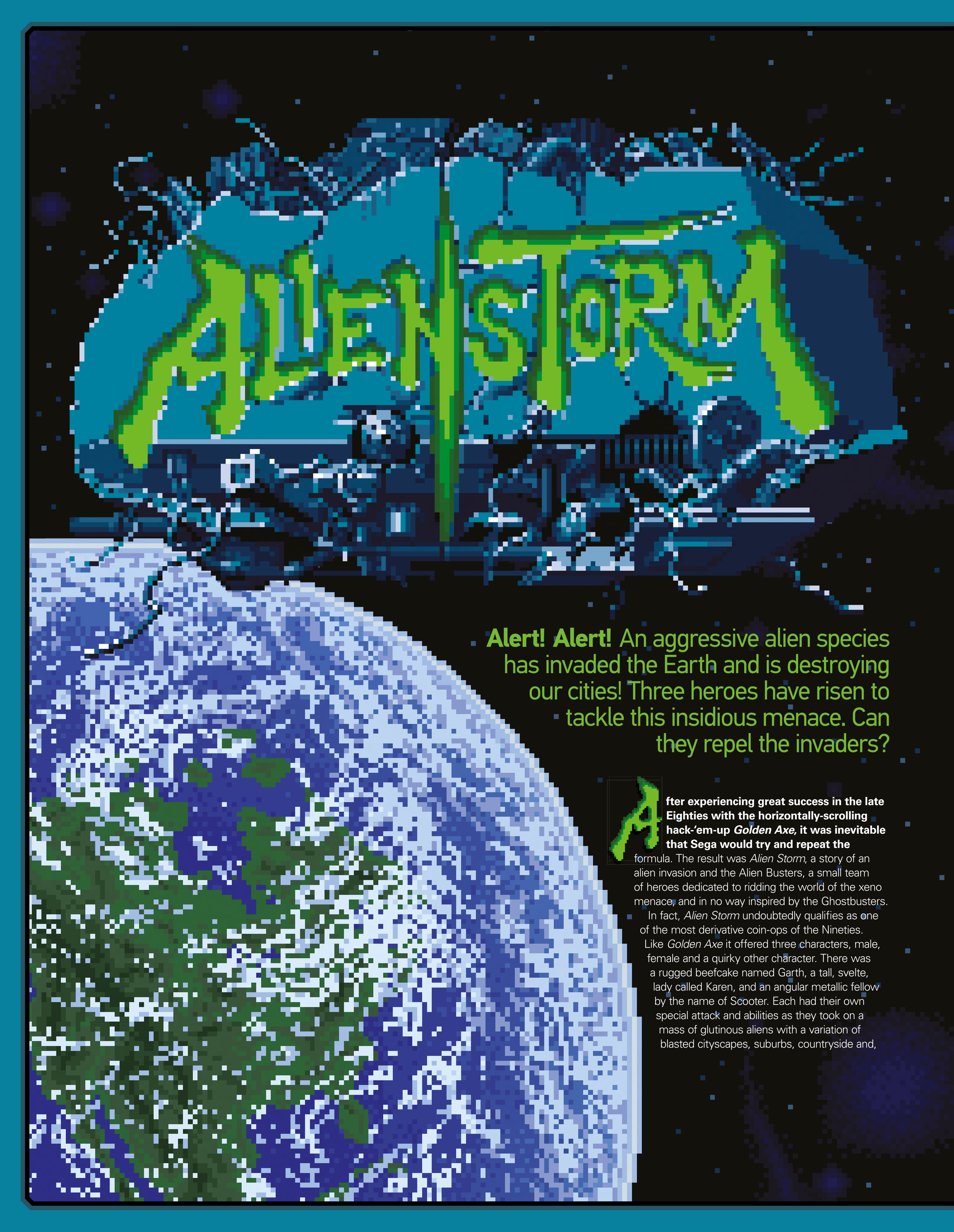
HOW SAVAGE PUSHED THE LIMITS. . .

Gigantic Sprites
Trantor: The Last Stormtrooper proved that the Amstrad was capable of large sprites, but the ante was really raised with *Savage*. Some of the foes you encounter in the first stage are gigantic and there's little to no slowdown.

Sumptuous Animation
While the animation of the warrior found on *Savage*'s first stage is quite impressive, it can't compare to the majestic eagle you control on its final stage. Not only is it huge in size, but it looks brilliant when it's flying.

Convincing 3D Effects
We can only imagine how good *Space Harrier* might have been on the Amstrad if David had gotten his hands on it. Probe pushed the 8-bit micros ridiculously hard and *Savage*'s second stage is an easy testament to that work.

Super Scrolling
The Amstrad is a pig when it comes to scrolling, and many developers didn't bother. David clearly didn't receive this memo, as both the first and second stages of *Savage* move exceptionally smoothly on the humble CPC.



Alert! Alert! An aggressive alien species has invaded the Earth and is destroying our cities! Three heroes have risen to tackle this insidious menace. Can they repel the invaders?

After experiencing great success in the late Eighties with the horizontally-scrolling hack-'em-up *Golden Axe*, it was inevitable that Sega would try and repeat the formula. The result was *Alien Storm*, a story of an alien invasion and the Alien Busters, a small team of heroes dedicated to ridding the world of the xeno menace, and in no way inspired by the Ghostbusters.

In fact, *Alien Storm* undoubtedly qualifies as one of the most derivative coin-ops of the Nineties. Like *Golden Axe* it offered three characters, male, female and a quirky other character. There was a rugged beefcake named Garth, a tall, svelte, lady called Karen, and an angular metallic fellow by the name of Scooter. Each had their own special attack and abilities as they took on a mass of glutinous aliens with a variation of blasted cityscapes, suburbs, countryside and,



» [Arcade] This peaceful prandial scene is about to be horrifically disturbed… by an onslaught of aliens.

eventually, the alien ship itself. Occasionally, the heroes would pop into an appropriate building, such as a supermarket, warehouse or garage, to clear out the resident nasties, before it was back to the streets for more alien-bashing fun.

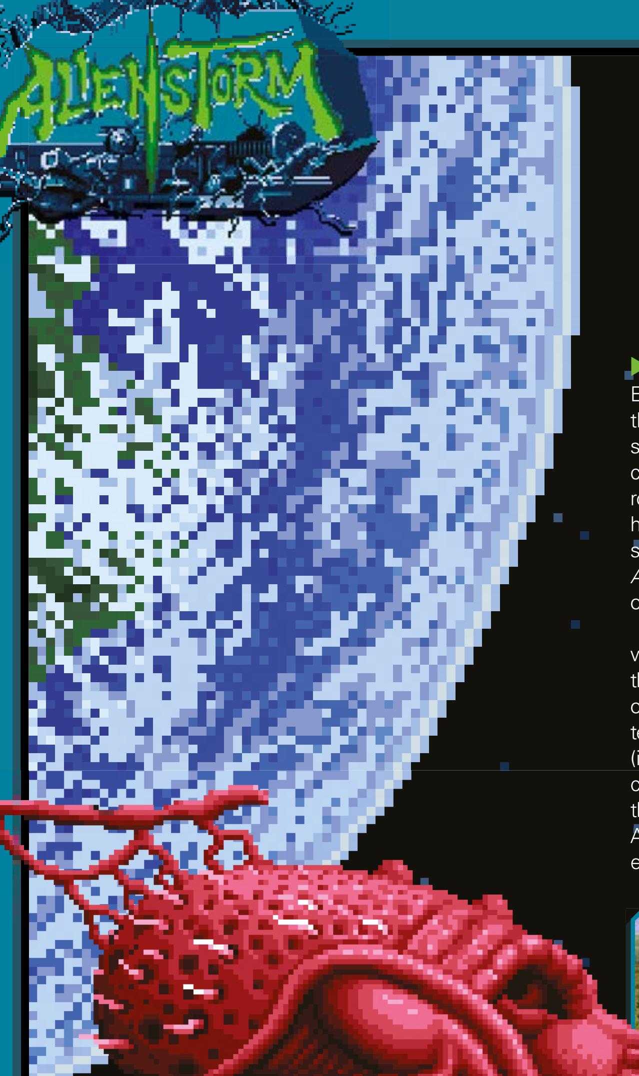
Alien Storm sported a 19-inch monitor and three sets of joystick and buttons for multiplayer fun, and in a rare moment of invention, the three players could battle simultaneously. The game utilised Sega's short-lived System 18 board, which was essentially a souped-up version of its previous System 16 board. The first major release to see action on this new board was Team Shinobi's *Shadow Dancer*, and the same cadre of developers is assumed to have been behind *Alien Storm* a year later. The formula was simple; a race of disgusting and blobby aliens have invaded the earth. Some are cunningly disguised as everyday objects, such as phone booths and



» [Arcade] It's early on and Karen sets fire to one gremlin-esque alien while another gnaws on an innocent bystander.

Pixel Perfect

- Garth
- Karen
- Scooter
- Energy Battery
- Flying Head
- Mutant
- Plant Alien
- Gremlin Alien
- Flat Alien
- Spider Alien
- Hovering Spiker
- Grub Monster
- Alien-In-A-Barrel
- Flying Alien
- Big Alien With Passengers



waste bins; others are more brazen, leaping around Earth's cities, swallowing people whole or spearing them with their deadly proboscises. Meanwhile, serving delicious yet expeditious food from their compact hotdog van are Garth and Karen, with the robotic Scooter as their metallic waiter. But wait! This humble trio are much more than simple cooks and servants. Soon the three are transformed into the *Alien Busters*, armed to the teeth, and ready to take on the vicious invaders.

That was about it for the plot, and *Alien Storm* wasted little time in getting the player, or players, into the thick of the action. Each character wielded their own individual weapon, with each weapon differing in terms of range and power. However, these weapons (including special attacks) required energy, and this could only be topped up by collecting power-ups from the floating heads of vanquished enemies. Should the Alien Busters find themselves short of energy, they each possessed a useful jumping attack that could be used to take out multiple aliens. A balance of using this technique and the more powerful weapons was key to succeeding through some of the trickier latter levels.



» [Arcade] Having worked their way across the ravaged city, the Alien Busters take the fight to the enemy.

> **"I was particularly pleased with the 3D sections"**
> Mike Ager

Team Shinobi, perhaps realising that further variety was required in order to impress gamers and divest them of their loose change, also included a pair of sporadic distinctive sections to spice up *Alien Storm*'s gameplay. At the end of each level, having battled across the city-under-siege, the game switches to first-person view. Including scenes such as a supermarket and a garage, each of these switches of view presents *Alien Storm*'s beasties in a different perspective, some wandering across the screen from left to right, others popping up right in front of the hero, lobbing deadly missiles in their direction. Underneath the frantic blasting lay a bunch of tactical decisions to make: do you take out the big alien at the back which is spewing more creatures onto the screen? Or despatch the other monsters that threaten our hero? And in a crowd-pleasing move, the designers also included destructible scenery,

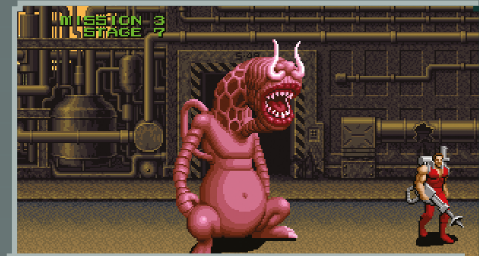
Boss Rush



Thunder Thrower

■ This initial incarnation of the first boss appears halfway through the game. It's slow moving, but tough, and shoots electricity bolts both in front and behind itself. These bolts emanate from several large and, erm, erect, tentacles.

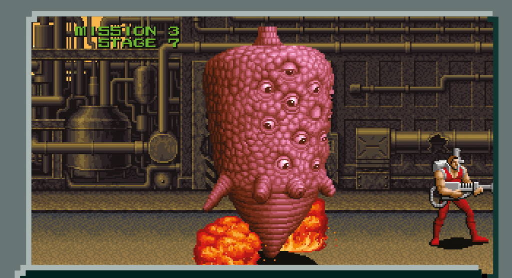
How To Beat: Perseverance! If you've got some energy left, wait until the bolts subside and charge in quickly. Anticipating them is even better. However, no energy will mean an even longer battle, but it is possible.



Nightmare Fuel

■ Think you've got it? Think again! After a certain amount of hits, the creature transforms into its upright form. Featuring more teeth than the cast of Glee, and a weird horns/nose combination, this is fast becoming the stuff of nightmares!

How To Beat: As befits its impressive dental work, this monster will try and bite the player's head off. Keep working the vertical angles and hit when you can, taking to care to avoid the sudden fist emanating from its stomach.



Eye Tornado

■ We're still not done here! Rain enough blows down and the creature will transform again, this time into this multi-eyed horror, spitting fire bullets at our hero. Again slow-moving, and again, nightmare-inducing.

How To Beat: As with the previous monster, use the vertical plane to your advantage. Anticipating which side the bullets explode is key to success here, and the flying jump attack can come in useful in certain situations, too.



» [Arcade] Each first-person section includes masses of destructible scenery.

and even encouraged its destruction with each shot spewing a pleasing burst of drink bottles or car parts across the screen. Under much of these levels' background lay vital energy batteries, essential to keep the heroes' weapons up and running. Less frequently, the player was led into a frantic dash, as the screen automatically scrolls at breakneck pace. Spider and flying aliens run ahead and must be eliminated, and craters must be jumped over to avoid losing precious life energy. The final of these sections memorably features a chase after the alien spaceship itself where the heroes finally face up against the alien menace in its own back yard, ultimately taking on, literally, big brain itself.



» [Arcade] Eagle-eyed gamers will spot the three heroes from *Golden Axe* on TV in the supermarket section.

Character Profiles



Garth

■ Brandishing a fearsome plasma gun, Garth is the brawns of the bunch, but this comes with a price – he's a little slower than the other two characters and his weapon has quite a short range. His special weapon is a dramatic airstrike.



Karen

■ Dropping a huge missile as a smart bomb attack and using a flamethrower to despatch aliens, Karen is a good all-rounder and nicely nips around the screen. A solid character for both beginners and experienced players alike, despite being more prone to taking damage.



Scooter

■ A huge imposing robot, Scooter is our favourite. Attacking enemies with a powerful laser whip, Scooter also has an amusing special weapon – he self-destructs, wiping out all enemies onscreen before another body strides in and reclaims its head.



Flying Heads

■ Having finally gotten the better of the gelatinous mass of eyeballs and goop, the boss explodes into a collection of tenacious flying alien heads. Well, they never said blasting aliens to save the day was going to be easy, right?

How To Beat: Don't waste energy on these little critters – not that you're likely to have much left at this point – simply fling yourself at them until they're all gone, before picking up those lovely gold batteries.

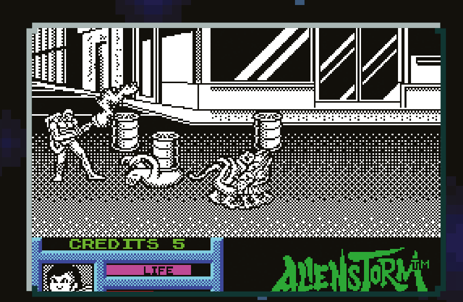


Final Fight

■ *Alien Storm*'s final boss features in the climactic first-person section. And it's a brain. A huge, disgusting brain, sporting a lone eyeball that succinctly reminded the **Retro Gamer** team of the opening to duff Stephen King movie *The Dark Half*.

How To Beat: There's only one real option here if you want to live through this. Take out the various resident aliens, pausing briefly to take a pot shot at big brain when there's a gap in the action. It may take a while…

Conversion Capers



ZX SPECTRUM

■ The Speccy port, while monochrome, is an admirable effort. The characters move well, most of the aliens are present and correct and there are some meaty sound effects on the 128k version. Even the first-person and running sections are included, although the game inevitably utilises the dreaded multi-loader.



AMSTRAD CPC

■ Squashed sprites and some sluggish movement disguise what is, again, a fairly admirable attempt at converting *Alien Storm* to an 8-bit computer. The game's fast running sections are also well presented on the Amstrad, and it's one of the better latter-era arcade conversions for owners of this computer.



COMMODORE 64

■ Like the Spectrum, this is a decent conversion by Mike Ager and Wayne Billingham that unavoidably replicates many gameplay issues of the original. Of note are the first-person shooting sections which the C64 handles with particular aplomb. The sound effects are a little too intrusive, but otherwise another decent 8-bit conversion.



AMIGA

■ Oh dear. The 8-bits had the excuse of being woefully underpowered – the Amiga had no such pretext to fall back on, and this is a lazy attempt. The graphics are acceptable, until they move, and the gameplay is stodgy, along with some bizarre sound design choices, including the absence of in-game music.



ATARI ST

■ While there are plenty of colourful sprites on display, the backgrounds fail to take advantage of the ST's capabilities and the main characters move rather sluggishly across the screen in the brawler section, sucking much of the joy out of *Alien Storm*. Another disappointing 16-bit conversion.



MASTER SYSTEM

■ While it mystifyingly contains only two characters to choose from (Scooter, renamed Slammer and Garth, now Gordon), and is graphically sparse, the Master System port is a respectable game. It's easier than the arcade game, the main character moves well and the sound is excellent. It's a shame it's only one player.



MEGA DRIVE

■ Sega's Mega Drive was renowned for its quality arcade conversions, and *Alien Storm* was no exception. While subtle graphical changes abounded, the gameplay was identical, with the welcome addition of two new modes: The Duel (a face off against enemies round by round) and a versus mode. An excellent conversion, perhaps unsurprising considering the Mega Drive shared its VDP (visual display processor) with the System 18 board.





» [Arcade] Fast-paced running sections spice up the gameplay.



» [Arcade] *Golden Axe*'s vertically-challenged hero Gilius Thunderhead is on hand to give out his parsimonious score at *Alien Storm*'s conclusion.

Due to its early Nineties release, *Alien Storm* was converted to a variety of platforms. The most successful, and renowned, was undoubtedly Sega's own Mega Drive conversion which enjoyed a popular second life when included in the *Mega Games 3* compilation, bundled with many latter releases of the console. Rather surprisingly, many reviews of the time were lukewarm; critics were disparaging of not only the ease of the game on the Mega Drive, but also the standard of the arcade forebear. Nevertheless, the game's playability and graphics shone through, and the inclusion of two extra modes more than made up for the loss of one of the original's levels.



On other platforms, the story was not quite so positive. The 8-bit home computer versions, published by U.S. Gold and created by Tiertex, predictably struggled, despite the admirable efforts of the respective developers. Protracted and frustrating multi-loads, while inevitable, also didn't help matters. But perhaps most disappointing was the 16-bit home computer ports, like the Mega Drive, powerful enough machines to do *Alien Storm* justice, yet sluggish and disappointing in their execution.

Despite its place in the classic era of arcade gaming, *Alien Storm* is not often regarded as a classic, and maybe given its derivative nature, this should not be surprising. However, to a generation of children, brought up on sci-fi fare such as *Star Wars* and the *Alien* movies, the game's grisly themes, partly disguised by its colourful and exuberant graphics, brought great appeal. Plus you could stand aside as a blobby suction-mouthed alien swallowed a middle-aged balding man whole, and there's not many games that can claim that. *

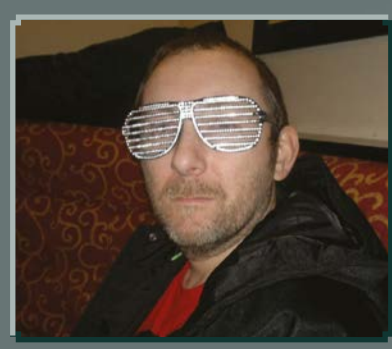
Developer Q&A

We catch up with Mike Ager, the man behind Alien Storm's Commodore 64 conversion

How did you get to work on *Alien Storm*?
It was my first game at Tiertex. There was no discussion about it, I wasn't asked what I might like to do, it was lined up for me pretty much from day one of walking through the door. I'd done a couple of arcade conversions before at Creations so I guess they had me penned in before I joined.

How did the conversion process work?
The norm back then, especially at Tiertex, was to have a copy of the game being played on VHS tape. No amount of asking would change that, even though it was blatantly obvious that it was essential to play the actual game.

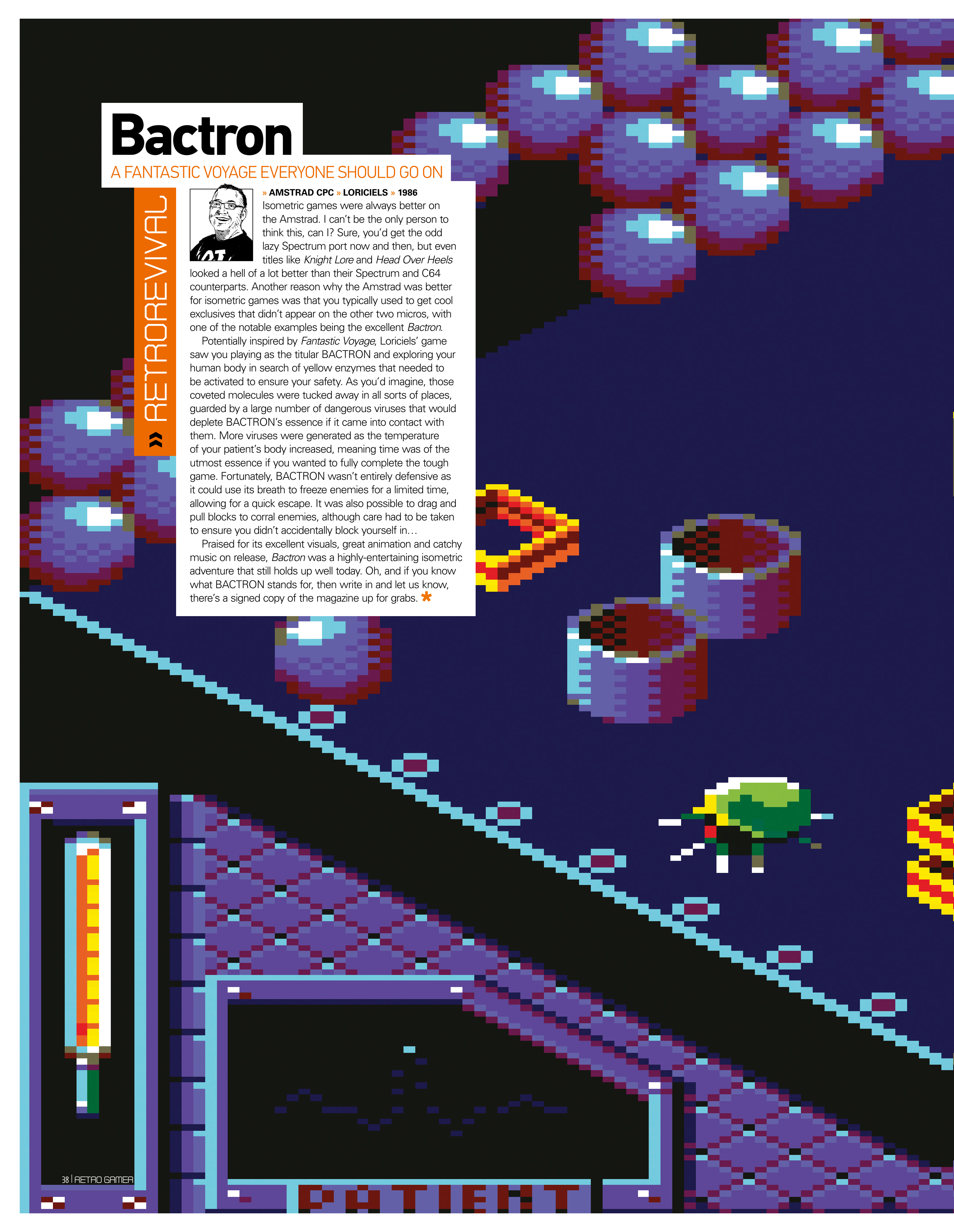
Did you find it a struggle to adapt the game to the C64?
I never really saw it as a struggle as I loved the challenge of squeezing the arcade game down. I was like, how can I make that work, rather than wondering if I could drop elements out. However, I did find the main part of the original game a bit disappointing to be honest. That didn't stop me wanting to make a great conversion, it was always important to me to do the best possible game. I was particularly pleased with the 3D sections which was the most challenging to emulate, but it was the most fun as I knew I could somehow make it look great. Most of the screen is moving around, in different directions to create the parallax depth along with some multiplexed sprites to achieve more than the standard eight available. All done in 60 frames per second, too, which was *the* most important part in order to achieve that lovely fluid movement.



» Mike has also worked on games such as *Mortal Kombat 3*, *Cosmic Storm* and a string of *Rugrats* games.

How long did you have?
Three months, which included playing the game and doing any design or planning work. There wasn't much care for how a game was completed, how it looked or played from the powers that be. We alone balanced time against quality as writing games was our passion first, and job second. It was far more important to do it well, than on time, although for the most part games were completed on time, usually after many unpaid hours and pizza drop-offs!

Were you happy ultimately with how C64 *Alien Storm* turned out?
Yes, and quite proud of some of the tricks I managed to pull to make the C64 version look as good as it did. I wanted to impress people with how well it was written and it was important to me to do the best possible game. I couldn't change anything about *Alien Storm*, the outcome was okay – just a little boring.



Bactron

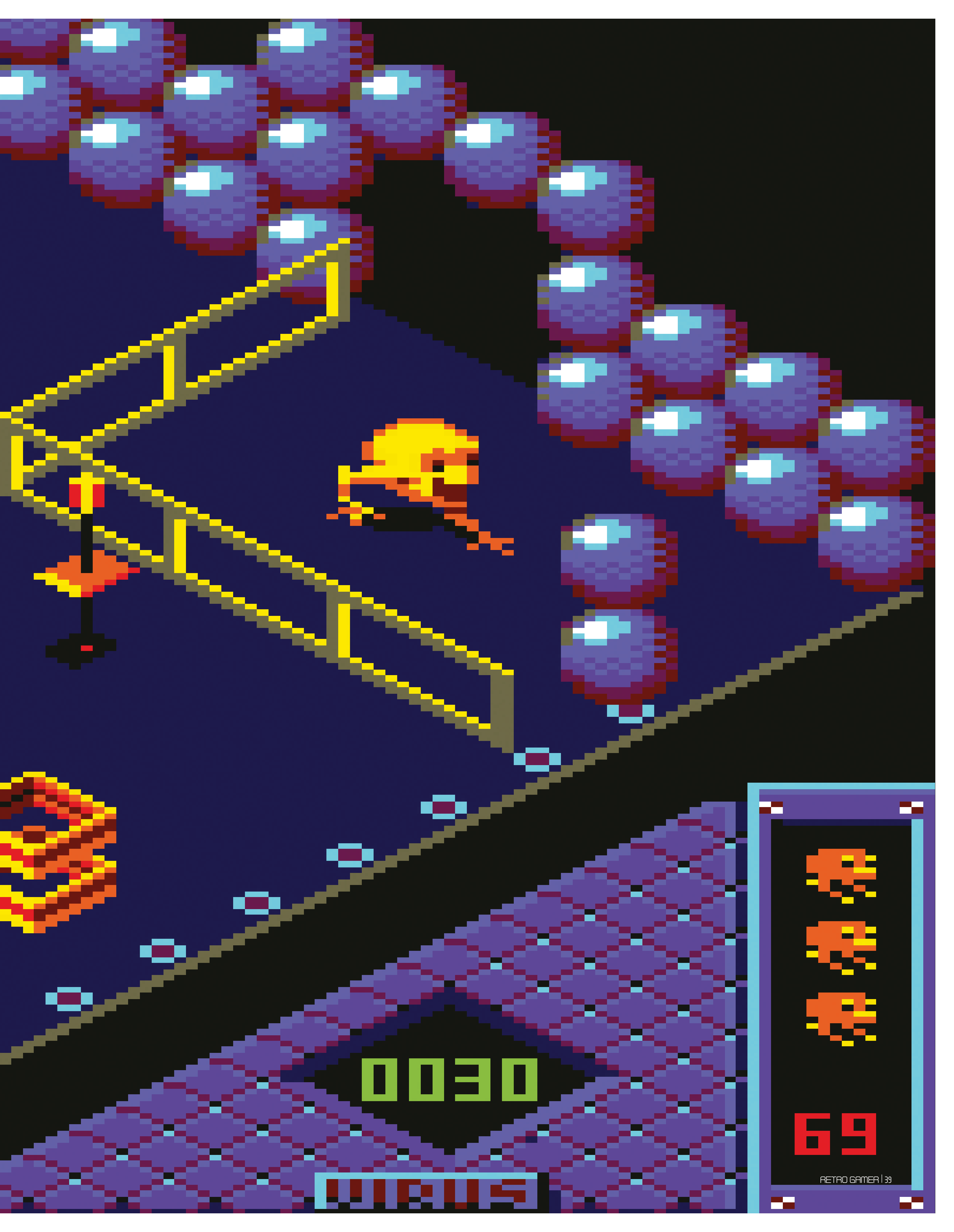
A FANTASTIC VOYAGE EVERYONE SHOULD GO ON

» **AMSTRAD CPC** » **LORICIELS** » **1986**

Isometric games were always better on the Amstrad. I can't be the only person to think this, can I? Sure, you'd get the odd lazy Spectrum port now and then, but even titles like *Knight Lore* and *Head Over Heels* looked a hell of a lot better than their Spectrum and C64 counterparts. Another reason why the Amstrad was better for isometric games was that you typically used to get cool exclusives that didn't appear on the other two micros, with one of the notable examples being the excellent *Bactron*.

Potentially inspired by *Fantastic Voyage*, Loriciels' game saw you playing as the titular BACTRON and exploring your human body in search of yellow enzymes that needed to be activated to ensure your safety. As you'd imagine, those coveted molecules were tucked away in all sorts of places, guarded by a large number of dangerous viruses that would deplete BACTRON's essence if it came into contact with them. More viruses were generated as the temperature of your patient's body increased, meaning time was of the utmost essence if you wanted to fully complete the tough game. Fortunately, BACTRON wasn't entirely defensive as it could use its breath to freeze enemies for a limited time, allowing for a quick escape. It was also possible to drag and pull blocks to corral enemies, although care had to be taken to ensure you didn't accidentally block yourself in…

Praised for its excellent visuals, great animation and catchy music on release, *Bactron* was a highly-entertaining isometric adventure that still holds up well today. Oh, and if you know what BACTRON stands for, then write in and let us know, there's a signed copy of the magazine up for grabs. *


0030
69

ACTIO



Gamers have long been used to titles being released on various media. We're familiar with cassettes and a lot of us have used the gamut of floppy discs. But there can't be a gamer on Earth who hasn't at least played a game on cartridge, CD or DVD. And, while downloads are all the rage today, we've had GD-ROMs and UMDs. We still make good use of Blu-rays, of course.

But have you ever played a game that has come stored on a VHS tape? We may associate these bulky items with flickering recordings of movies from the Eighties, but back in 1987, the bods at the American toy company Worlds Of Wonder released a console called the Action Max which made use of this very medium. What's more, it wasn't the only one. The View-Master Interactive Vision attempted to use VHS the following year. Suffice to say, neither of them were successful.

The Action Max is intriguing. It began life in 1987 at the hands of Worlds Of Wonder (WOW), a fast-growing company which was no stranger to gaming. Formed two years earlier by a group of five former Atari employees, WOW was headed by Don Kingsborough who had risen from Atari's top salesman to head of sales and distribution. Its bestseller was a licensed animatronic children's toy bear called Teddy Ruxpin which regaled stories from a cassette while moving its mouth and eyes. This had been followed in the popularity stakes by an infrared pursuit game called *Lazer Tag* (which actually went on to spawn tie-in versions for the ZX Spectrum, Commodore 64 and Amstrad CPC in 1987).

The success of these products saw Nintendo beat a path to its door. The gaming giant had been impressed by Worlds Of Wonder's impact on the US toy market in such a small space of time and it felt the company could help it to gain a speedy foothold in America. Nintendo asked WOW if it would become its marketing partner, taking on the distribution of its first home console, the NES. Don agreed, even though three former Atari sales reps who had gone to work for Worlds Of Wonder were sceptical that the move would pay off. They believed the games industry would only serve to drag them down



N MAX

Worlds Of Wonders' unique console blasted on to the scene for a short while, spawning just five games and made use of VHS cassettes. David Crookes takes a look at this curiosity of the late Eighties

and that there was more money to made from selling innovative toys.

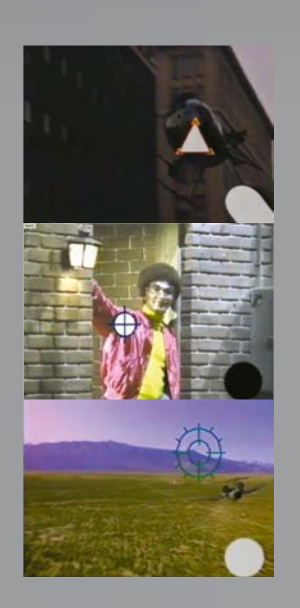
"The Action Max appeared to take a cue from a glut of board games"

Luckily for both sides, their pleas fell on deaf ears and the Nintendo deal stood, opening many retail doors for the Japanese giant. The NES went on to become Worlds Of Wonder's bestselling product and three million units were sold in the US by the end of 1986. This pleased Don who once more saw great potential in the videogaming market but even though sales soared at the start of 1987, Nintendo felt WOW had done its job and it wanted out of the deal. If WOW was to continue any success in the gaming industry, it had to come up with its own machine.

By the end of the 1986-1987 financial year, WOW had made an profit of £23 million on sales of $320 million and it had a sizeable research and development budget. It used some of this cash to fund the creation of a new machine which it would call Action Max. Rather than ape Nintendo and opt for cartridges and a console capable of processing a large number of pixelated titles, though, it appeared to take a cue from a glut of board games that had been making use of videotaped footage instead.

These board games had sprung to life with *Clue VCR Mystery Game* in 1985, riffing on *Cluedo* by having actors play Colonel Mustard et al while players sought to deduce who murdered who, with what weapon and where. It led to the likes of *Doorways To Adventure* (which packed the tape with movie clips) and *Candy Land VCR Board Game* which included two picture-matching and two colour-matching games on a tape and asked players to remove cards that matched the clues. Yet the Action Max – which cost $130 in the US – eschewed cards and boards in favour of something played entirely on the television.

It was nothing if not different. Rather than use the VHS tapes as a medium for storing gaming data, allowing software to be loaded and played, the cassettes merely contained hammy video footage that was either shot for the purpose of making some interactive entertainment or else culled from a movie. The action in each game ran for a total of 18 minutes, during which you'd be taken through a scripted scenario including actors that spoke to the camera. While the tape was being played, designated targets would appear on the screen marked by a flashing white light. Gamers had to use a lightgun to fire at these targets in the hope of



ACTION MAX

THE ACTION MAX RIVAL

Looking less like an electronic device and more like something thrown together with Lego, the View-Master Interactive Vision was created by the same company which produced the popular and infinitely better-known red plastic 3D goggles. Like the Action Max before it, the console connected to a VCR and ran games stored on VHS tapes. It downloaded program data from the cassette which told it what to do with the tape's video and audio. This enabled it to switch between audio tracks, overlay graphics on to the video and even block sound and vision if it needed to.

It worked well. Marketed as an educational machine in 1988, the games were largely based on puzzles, timing and choice and, while notably simple, they involved some very recognisable characters. Of the seven released games, five were based on *Sesame Street*, two on the *Muppets* and one on Disney and because each benefited from real video footage, the games looked like proper cartoons or bona-fide episodes of puppet favourites. Disney's *Cartoon Arcade* – created by Cinemaware, of *Defender Of The Crown* fame – arguably pushed the technology the most and it showed the potential the console had.

Not that it was perfect, far from it. For all the pros of having scores display on the screen and varied games, fast-forwarding, rewinding or pausing the tape at the wrong time wreaked havoc, and the controller – while boasting five different-coloured buttons and a joystick – was clumsy and uncomfortable. With a limited catalogue and little future for VHS games, it's no surprise that, like the Action Max, this console failed to truly take off.



» [Action Max] These planes in *Sonic Fury* are in your sights but whether you blast or not, the on-screen outcome will be the same.

gaining the highest score they could while avoiding any friendly fire which resulted in points dropped.

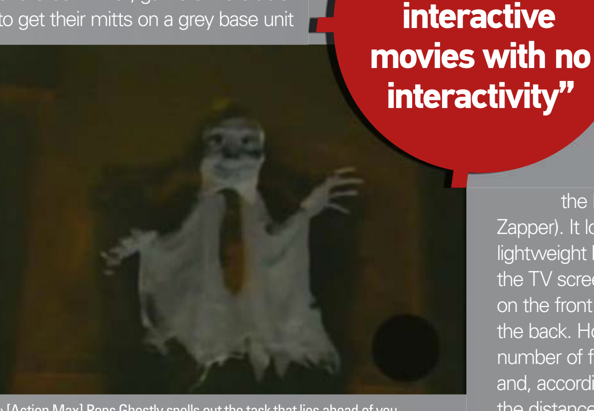
There was no way of controlling how the videos played, nor was there any way to 'die'. You couldn't win or lose, either. If you managed to avoid having a seizure or a migraine from the bright, flashing lights, you'd simply keep playing until the credits rolled and then see how well you did. Yet here's the thing: when an actor bawled, "Good shooting!" they didn't really know how well you'd done and when they urged you to. Explosions took place regardless of what you did and the action continued apace no matter if you just sat there with the gun on the floor – you just wouldn't get any points. The games were, in short, interactive movies with no interactivity and you were just shooting away at items which didn't react to what you were doing.

So what did you actually get out of the box? Well, gamers were able to get their mitts on a grey base unit console which, aside from a jazzy white stripe running through the centre, wasn't much to look at. It had an 8-bit HD401010 processor that ran at 4 Mhz as well as 32 bytes of RAM and 1KB of ROM. It ran off a power supply or four C batteries and it could make use of NTSC resolution of 320x200 and a PAL resolution of 320x256.

On top of the console was a handful of switches and knobs and an LED score display and there were ports at the front and the back into which slotted a handful of peripherals. There was no slot for any gaming media, though. The idea was to set up your existing VCR as if you were watching a movie and then hook the console to the video player by connecting the audio cord to its output jack. Of course, this assumed the gamer actually had a VCR, but by 1987 prices had dropped to $250 in the US and ownership of a player had become widespread (this was the year *Top Gun* was sold for $26.95 which was the lowest price for a major Hollywood tape). Prerecorded video sales had expanded and so it was believed that many of the 43 million American households with a VCR at that time would want to take advantage.

"The games were interactive movies with no interactivity"

The polystyrene packaging also held the lightgun (perhaps with a nod to Nintendo's Zapper). It looked very bland and felt flimsy and lightweight but it could work at up to 15 feet away from the TV screen and gamers aimed it by lining up the tab on the front of the barrel with the notch that was at the back. How close you got to the TV depended on a number of factors: the size of the screen, its brightness and, according to the manual, its age. You had to adjust the distance knob on the console to tally with how far



» [Action Max] Pops Ghostly spells out the task that lies ahead of you.

USING HEADPHONES
■ The bundled stereo headphones plugged into the left-hand port on the front of the console.

BASE UNIT
■ The various components of the Action Max plug into this base unit. A video player connects to an audio port where there's also switch for mono/stereo sound.

KEEPING SCORE
■ This display keeps score. To get around having just two digits, it flashes when the score reaches 100.

VOLUME CONTROL
■ By turning this knob, you are able to control the volume. Sound can be heard via headphones and the base unit speaker.

DISTANCE CONTROL
■ In setting up the console, you have to aim the gun at the TV and turn this knob to match your distance from the TV.

TWO-PLAYER GAMES
■ To allow you to compete against a mate, this switch was added to let you switch between the first and second player.

LIGHTGUN
■ The nature of the Action Max meant it could only be used with a lightgun controller. It had a range of 15 feet and was plugged into the right-hand port of the system.

POWER SWITCH
■ A switch in the centre of this front panel can be flicked to toggle the built-in console speaker on or off.

SCORE SIGNAL
■ The so-called score signal plugged in the back of the console and had to be stuck to the bottom-right of the TV screen. It lit when targets were hit.

GAME SETTING
■ The Action Max had different settings. A standard game was achieved by keeping this switch up. To play with limited ammo, you'd flick the switch down.

away you were in order to shoot accurately. The system also allowed for two lightguns to be used simultaneously.

Before you could get down to the business of playing, though, there was another peripheral to deal with: a red sensor. As you may have guessed, connecting an audio cable between the Action Max and the console only served to deliver sound to the machine. To get the machine to work out when a player hit a target, the sensor had to be plugged into the base unit and stuck to the bottom-right-hand corner of the television screen. It's seems laughable today but it worked a treat and it meant the console could be used without a physical connection to the VCR. When you powered up the video player, inserted an Action Max game and started to see targets on the screen, the sensor would flash and the Action Max would use this light in conjunction with the flashes being emitted from the enemies to figure out your score.

Any points you gained, would be displayed on the console itself rather than on screen. Weirdly, the LED display only had two digits even though it was perfectly possible to gain scores of three – to get around this very odd bit of cost-cutting, the score would flash as soon as you reached 100 points so if you ended up with a score of 150, for instance, you'd see a flashing 50 and you'd have to do the maths. But then if you got a score of 250,



» [Action Max] By using filmed footage and actors, games such as *Blue Thunder* certainly looked like interactive movies.

the 50 would be still. It meant you had to keep a little eye on the score display while you played to make sure you knew what it was actually telling you. On top of all of this, you got a pair of poor, throwaway stereo headphones, although the console included a built-in speaker, too, that you could turn on and off.

There were just five games in total: *Sonic Fury*, *.38 Ambush Alley*, *Blue Thunder*, *Hydrosub 2021* and *The Rescue Of Pops Ghostly*. Each Action Max came with *Sonic Fury* which saw players take to the air to blast at combat drones and enemy aircraft. Like the other titles for the machine, it began by getting you to adjust the brightness and contrast of the screen before displaying an Action Max ident that was typical of the shoestring home movie VHS intros of yesteryear, complete ▶





with an upbeat jingle. It then instructed gamers to "standby for target practice" and spent a minute or so getting the player to fire at the centre of the target practice while adjusting the distance. It also explained the setup and premise of the game before getting it underway. The game would end with rolling credits whereupon you'd check your score and wait to see previews of other games.

Games ended up retailing for as little as 99 cents and it was easy to spot them on the shelves since the cardboard sleeves looked near-identical, showing the back of a child's head as they pointed the lightgun at a screenshot of the game. In each case, the title would be displayed at the bottom and the Action Max logo emblazoned at the top.

Four of the five games were created from scratch by a US company set up in 1983 called CCR Video Corporation. *Sonic Fury* was written and directed by Don Kline who went on to appear as a character in a straight-to-video release called *Slow Burn* in 1989. His cowriter, Greg Corarito, had a longer filmography, credited with a host of acting, directing and producer roles on movies as memorable as *The Sadistic Hypnotist* and *Diamond Stud*. But even though *Sonic Fury* looked very much like a low-budget release, the crew list was lengthy with no less than 37 people involved in its production, in disciplines such as special effects, music, film editing and animation.

The Rescue of Pops Ghostly, *.38 Ambush Alley* and *Hydrosub: 2021* were all produced by Bruce Cohn (via the company Bruce Cohn Productions, Inc) whose only other credit is a documentary called *Kisses* which looks at the importance of the kiss in films from the Twenties to the Fifties. Ross F. Heil, a producer on *Sonic Fury*, was also the producer on these three titles, with Ron Brody directing the lot. *The Rescue Of Pops Ghostly* used puppeteers while *.38 Ambush Alley* was filmed on location within an actual police academy. But one game was produced very differently: *Blue Thunder* was based upon the 1983 film from Columbia Pictures that spawned a TV series a year later and it used footage from the movie. It had music by Sylvester Levay of *Airwolf* fame and it was created with the aid of, Columbia Pictures' syndication unit, Coca-Cola Telecommunications, which shut down at the end of 1987 – two months after the stock market crashed in October.

> **"Blue Thunder was based upon the 1983 film from Colombia Pictures"**



» [Action Max] Since you were supposed to be shooting in a police training facility in *.38 Ambush Alley*, none of the targets were real people.

Monday, 19 October 1987 had become known as 'Blue Monday' and it couldn't have come at a worst time for Worlds Of Wonder. The company – which was actually given its name because Don liked the idea of the word WOW appearing in the stock market listings – was starting to suffer poor sales and the effects of a tight economy and to make matters worse, it was reeling from the news that 19-year-old college student Leonard Falcon had been shot dead by a deputy sheriff

EVERY ACTION MAX GAME



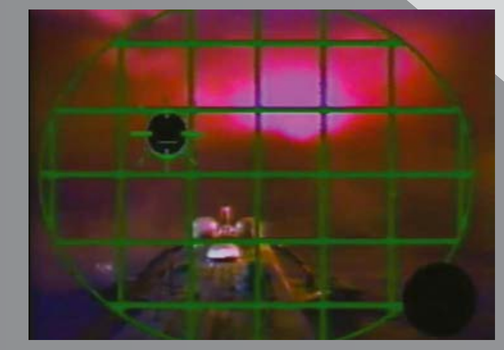
.38 AMBUSH ALLEY

■ For a cop-based shooter, this game was surprisingly low on gore. But then you were playing a rookie officer at a police academy tasked with shooting at cardboard targets and mannequins. Sit back and admire the cheesy acting as you sedately move through a smoky American backstreet popping a bullet into anything that (didn't) move.



BLUE THUNDER

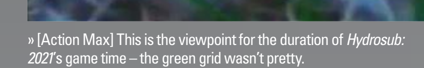
■ Based on the 1983 action thriller of the same name, *Blue Thunder* was Action Max's best game. Using footage from the movie, it had you protecting world leaders by taking to the air in a chopper before aiming and firing at your foes while the helicopter ducked and dived. The aim was to gain 300 points or more to rank as Squadron Leader.



HYDROSUB: 2021

■ This provided some underwater action in which you defended your craft against a host of mechanical crabs and enemy submarines. The cutscenes tried to infuse drama but you simply viewed the action through an ever-present grid as wave after wave of "blasted creatures" (as the game puts it at one point) came into view, ready to be blown away.





» [Action Max] This is the viewpoint for the duration of *Hydrosub: 2021*'s game time – the green grid wasn't pretty.

during a game of *Lazer Tag* as he darted around the darkened buildings of Central Elementary School in Los Angeles during a mock combat with friends.

As the company issued non-investment grade bonds – or 'junk bonds' as they are also known – to keep itself afloat, it soon became apparent that it could ill-afford to throw any significant weight behind the Action Max. Instead, it ended up flogging off its toy lines to the highest bidders, allowing Playskool and Yes! Entertainment to buy *Teddy Ruxpin* and handing *Lazer Tag* to Shoot The Moon Products. There was seemingly no appetite for snapping up the Action Max so the console went to the great console graveyard in the sky when WOW ended up being liquidated in 1988. Worlds Of Wonder then became officially defunct in 1990, after it had been run by creditors for a couple of years.

But interest in the console didn't completely stop there. A sixth game called *Fright Night* was said to have been created for the system and collectors have spent much time trying to find out more about it, arguably making it more intriguing than the console itself. That, in turn, makes it the hardest of the games to find for the Action Max, followed by *Blue Thunder*, but the other games are fairly easy to get hold of, especially *The Rescue Of Pops Ghostly* – a game that appeared to interest almost every owner of the Action Max given the large numbers that appear to be around.

So if you're after picking up an Action Max, and assuming you have a VCR to hand, you're in luck. We've seen full systems selling for just £29.99 and they're not that difficult to find. That said, we've also seen all five games, including *Blue Thunder*, on offer for $695 (or around £560) – a staggering amount that is about as silly as the games themselves. We could never advise you paying so much – after all the Action Max is only really ever going to be a footnote in the history of gaming consoles. If you're truly interested in this novelty machine, you'd be far better served heading over to YouTube to watch the videos in full and have a good laugh at the terrible acting and visual effects. Prepare for action? Maybe not. *





Hardware images © Evan-Amos. Screenshots courtesy of YouTuber, Retro Reality.



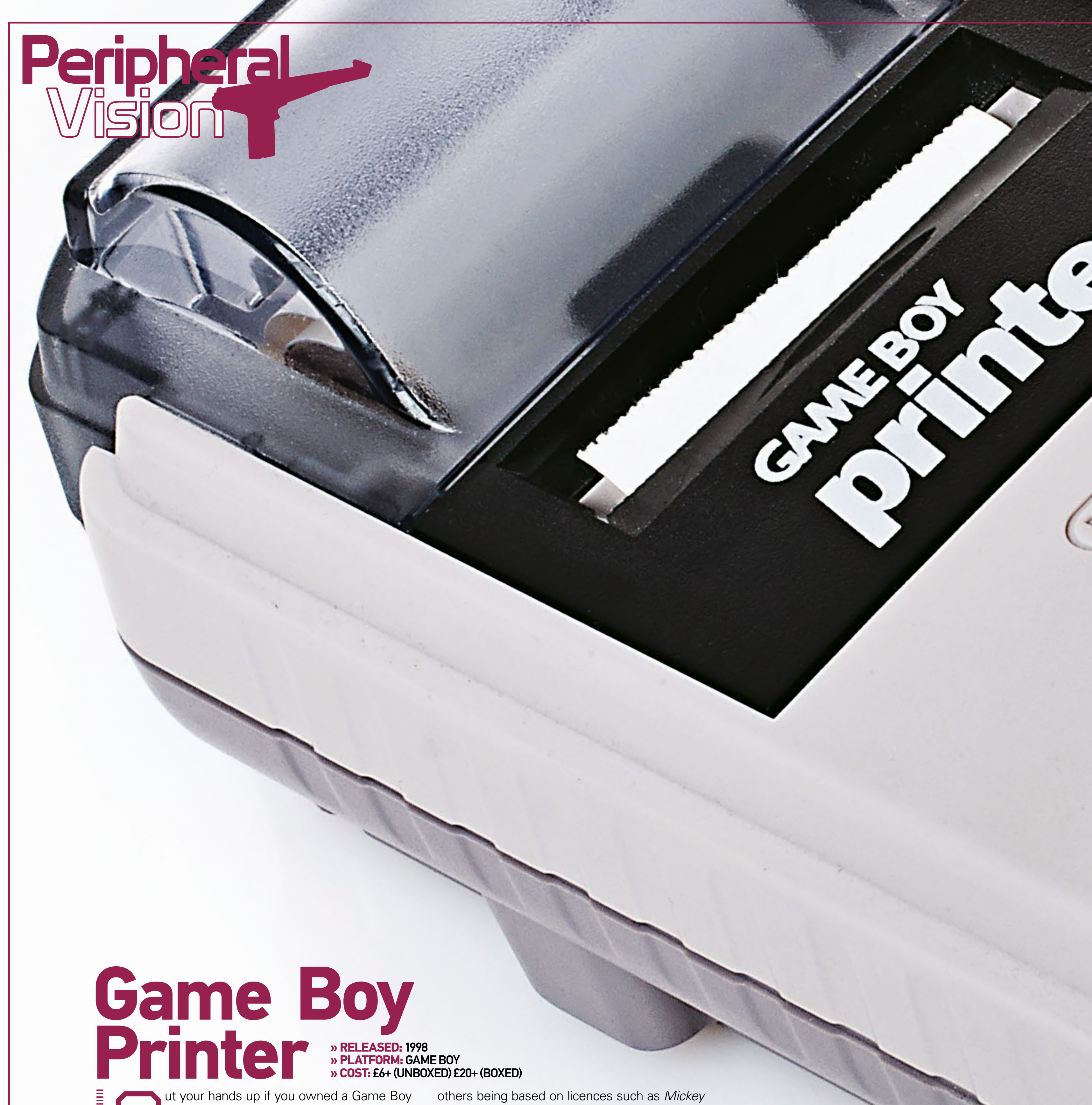
THE RESCUE OF POPS GHOSTLY

■ As the door of a suburban house closed, you were called upon by a friendly ghost to help rid his home of an evil set of ghastly ghouls. The spooks came thick and fast, providing plenty of trigger action for any Ghostbuster at heart, but despite being creepy and chilling, the game was infuriatingly repetitive, infinitely raising the chances of becoming bored to death.



SONIC FURY

■ Bundled with the Action Max console, *Sonic Fury* was a frenetic take on the mid-Eighties favourite *Top Gun* and it involved you shooting down the enemy while avoiding blasting planes on your own side. Lots of verbal patter and sweeping scenery shots set the scene and it maintained interest with fast jets, a rear-view mirror and some neat explosions.



Game Boy Printer

» RELEASED: 1998
» PLATFORM: GAME BOY
» COST: £6+ (UNBOXED) £20+ (BOXED)

Put your hands up if you owned a Game Boy Printer when they were first released? No one? We can't say we blame you, as we never owned Nintendo's thermal printer either. By the time the device was released in 1998, we'd long moved on from Nintendo's Game Boy, and while we were aware of – what is admittedly a rather nifty – device, we certainly weren't interested in owning one.

Indeed, you only had to look at the 37 games that were compatible with the device to realise that it was aimed at the younger market, with six of the available releases being *Pokémon*-related and many others being based on licences such as *Mickey Mouse*, *Tarzan* and *E.T.*. On *Pokémon Yellow*, it was possible to print off Pokédex entries for the likes of Bulbasaur and Pikachu, while profiles of characters could be printed off when playing *Perfect Dark*.

Powered by six AA batteries, the Game Boy Printer really shone when used in conjunction with the Game Boy Camera, as it was possible to take various photos of yourself and friends, doctor them in a number of ways (adding big eyes for example) then printing the resulting creation out and sticking it on your friend's back when they weren't looking. Now that actually does sound like fun…



ESSENTIAL GAME Pokémon Yellow

The collectible nature of the *Pokémon* series makes it the perfect bedfellow for the Game Boy Printer. As we've mentioned previously, it's possibly to print off Pokédex entries of every single *Pokémon* in the game (although we dread to think how many rolls of paper that would cost. We've even heard one tale of a person who effectively created their own scrapbook, printing off images of each captured critter as they found them and writing a little diary entry next to it, stating the time and place and the difficulty in obtaining it.

Game Boy Printer Fact

■ Nintendo's printer has impressive compatibility and can be connected to every single Game Boy with the exception of the Game Boy Micro.

URIDIUM 2

Andrew Braybrook had ideas for an Amiga follow-up to his C64 classic Uridium as early as 1987, but his sequel didn't appear until 1993. Rory Milne asks Andrew how he ensured that Uridium 2 would be worth the wait





» [Amiga] Blowing-up the reactor in *Uridium 2*'s sub-game isn't easy, but the payoff is multiple power-ups.

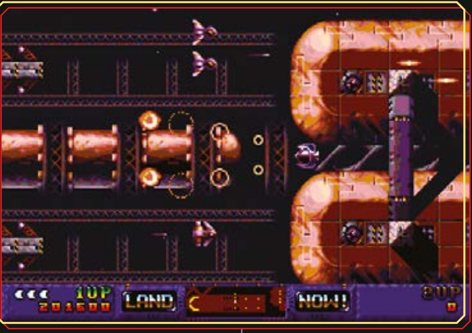
> "I was ready to do [Uridium 2], so I wouldn't have taken much persuading"
> Andrew Braybrook

Following a late-Eighties shift from 8-bit to 16-bit development, renowned design firm Graftgold switched from Atari ST to Amiga-led projects as the popularity of the ST waned. A successful platformer was the result of this new policy, but as its creator, Andrew Braybrook, explains, *Fire And Ice* also offered some side benefits. "We had just started to work with *Renegade*, set up by the Bitmap Brothers. We had decided to do a platform game, and *Fire And Ice* came out of an early demo. Once that was complete, we had enough know-how to implement *Uridium 2*, which would place a lot of demands on the hardware. I can't remember whose idea it was to write it, I was ready to do it, so I wouldn't have taken much persuading."

Press releases around this time, however, touched on rights issues leading to lawyers and receivers requiring more persuasion to embrace *Uridium 2*, on which



» [Amiga] A surface-targeting power-up allows the Manta to easily take out the Ornasten's onboard defences.



» [Amiga] From the Selenium Dreadnought onwards, onboard jammers create interference on the Manta's radar.

Andrew offers a few informed theories. "It's possible that Mindscape wanted in because we had licensed the development of 16-bit versions of *Uridium* to them in 1986. That may be why they ended up distributing the new version. I wasn't too involved in publisher negotiations; *Renegade* did all the dealings with Mindscape. But we wouldn't have started if we hadn't felt confident to be able to publish."

Once legal agreements were in place, Andrew could start laying his sequel's foundations, which, understandably, took their cue from the original *Uridium* while referencing contemporary shooters. "I just wanted to introduce the 16-bit market to *Uridium*, so I was happy to keep the plot and backstory of the original. Of course, arcade games and computer games had moved on, and I was keen to include new features. Working with a relatively large bitmapped screen rather than a character set also meant trying new techniques

SUPERB 16-BIT SEQUELS

More Amiga follow-ups to 8-bit classics

PARADROID 90

1990



■ Arguably more an upgrade than a full-blown sequel, *Paradroid 90* boasts beautiful metallic visuals and immersive sound effects. As the game was designed for the Atari ST, its expansive play area is restricted to vertical scrolling, but more importantly, *Paradroid 90* retains its predecessor's superlative shootouts and droid assimilations.

SWITCHBLADE II

1991

■ Possibly because the *Switchblade* was also released for the three main 8-bit computers, the similarly-styled Amiga iteration doesn't quite feel fully 16-bit. *Switchblade II* addresses the concessions made by the original with large sprites, filmic backdrops and set-piece bosses – and it also plays out in more open space.

NEBULUS 2

1991



■ Although not designed by *Nebulus* developer John M Phillips, the second instalment does revisit his rotating tower mechanic. The sequel also gives protagonist Pogo imaginative new power-ups and devious new challenges. *Nebulus 2*'s bonus rounds, like the original's, set bizarre tasks, such as dodging rocks while riding dodos!

WIZKID

1992

■ A follow-up in so much that it continues *Wizball*'s story, *Wizkid* deserves credit for not rehashing the gameplay of the title that preceded it. Instead, *Wizkid*'s eclectic challenges include dispatching waves of foes by head-butting objects at them, collecting musical notes and coins to buy power-ups, and playing *Scrabble*.

TURRICAN III

1993



■ Criticised for playing more like a console title than Manfred Trenz's earlier C64 chapters, *Turrican III* never the less honours the franchise's defining traits of gravity-defying platforming, plentiful power-ups and gigantic bosses. Admittedly, the game's platform sections are more forgiving, but this doesn't lessen its overall challenge.

URIDIUM 2

to achieve the desired onscreen results. Power-ups seemed to be common by this time, so I wanted to add them as a feature, plus in-game speech."

In terms of design, Andrew's approach to *Uridium 2* was one of evolution, with his core goal being to retain the magic of its predecessor. "Storyboards are fine for movies; but games of our ilk were more driven by what we could technically achieve, so they tended to get developed and tuned as we went along. Knowing that the game design worked took a lot of pressure off, we just had to make sure we didn't break it."

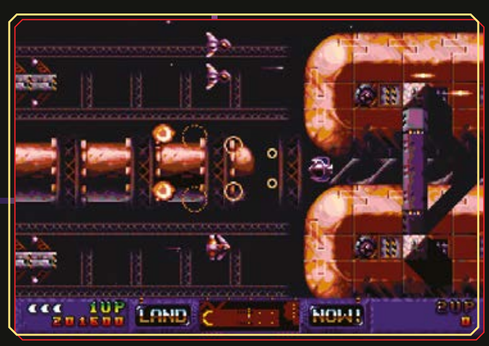
Just as important to *Uridium*'s success was the velocity and manoeuvrability of its actual starship, and so Andrew made his sequel's Manta equally fast and agile – and made improvements. "The control mode for *Uridium 2*'s Manta started frame-for-frame identical in speed and acceleration to the original," he explains. "The only modification was that being able to fly upside-down let it do a half-loop without the final half-roll to get it back up the right way. Later, we felt the need to adjust the acceleration rates to deal with the vertical scrolling and the more complex situations in later Dreadnoughts."

Although not all equally complex, *Uridium 2*'s Dreadnoughts would all have better defences than the original game's, which prompted Andrew to give his sequel's Manta more firepower. "Since we could make the enemy Dreadnoughts bigger, that affected the dynamics of the game later on when vertical scrolling got used; we needed more 'things' to fill the space, and more weapons to deal with them. I liked the homing missiles in the arcade game *Slapshot*, and implemented a variation. I found that the additional weapons changed the dynamics a lot, so rather than throw more enemies and bullets at the player you only got one power-up at a time, and I made some expire. You got a limited number of bombs, but they did give you a chance to destroy bits of the Dreadnought infrastructure easily for rewards. Having ground targets and aerial ones did make life more hectic for the player once they needed different weapons to do the job. Swapping weapons gave the player something else to think about; do they risk trying to pick up a nice weapon, or stay safe?"

> **"Knowing that the game design worked took a lot of pressure off"**
> Andrew Braybrook

Evolution of the Dreadnoughts and their weapons followed, which Andrew remembers being driven by his art team. "The artists were coming up with ground weapons. Steve Rushbrook was responsible for the mean white lasers on Dreadnought set four, for example. You can see when they're going to fire, getting out of the way is more tricky! It was clear that *Uridium 2* was hard to play. So the ships that we developed for the first Dreadnought set ended up being the second Dreadnought set, and we had to make an even easier set to start with."

As well as balancing the difficulty of *Uridium 2*'s Dreadnoughts, Andrew also found time to devise a mechanic where 'Victory Points' collected after destroying key opposition or targets would allow players to finish levels early. "The 'Victory Points' just helped to speed things up. Giving players alternative ways of achieving goals is a good mechanism to get them thinking, and a quick route through is also a nice reward."



» [Amiga] An unexpected 'Land Now' call catches the Manta unawares and far from Joquium's landing strip.

Further enhancements to *Uridium 2* included ingenious 'wingman' options, which Andrew facilitated by adding a drone that would mirror a solo player's actions or operate under limited control of a second player who would take full control when its partner bit the dust. "The one-player/two-ship mode took a while to get right. The second Manta moves the same as the first, but a few frames later. Two-player simultaneous play on the one screen wouldn't have worked with full freedom, the screen scrolls way too fast. Tying the ships together didn't give the wing man as much to worry about, until the front Manta got blown up."

Besides expanding the gameplay, Andrew had to consider how to best update the post-level Dreadnought destruction challenges set by the original *Uridium*. "I wanted something more sophisticated than a timing test. I wanted to revisit a *Paradroid*-type environment and did a top-down, inside-the-ship view. The idea was that the pilot is dropped inside to blow up the reactor. That ended up taking a lot of data, so we scaled back the idea to a single reactor room side-on view. It was Steve Rushbrook who came up with the background, and I persuaded him to do the baubles that rotate in 64 frames. He still hasn't forgiven me for that tricky job!"

And in order to make *Uridium 2* less tricky, Andrew worked out a way to give Manta pilots a heads-up. "The

AMIGA SHARPSHOOTERS Other standout Amiga shoot-'em-ups



APIDYA 1992

■ Heavily influenced by Japanese coin-op shooters, *Apidya* delivers high-speed movement and absolute control over its insect protagonist. By combining a nature theme with upgradeable, selectable weapons and an *R-Type* 'build-up' mechanic, *Apidya* feels both fresh and familiar at the same time.



PROJECT-X 1992

■ The reputation *Project-X* has for being rock hard is well deserved. That said, Team17's graphically stunning *Gradius* tribute doesn't frustrate with cheap deaths. Your ship does jettison power-ups when you lose lives, but then the coin-op that inspired *Project-X* is similarly unforgiving.



AGONY 1992

■ As visually impressive as *Shadow Of The Beast* but with more substance, Pygnosis's *Agony* features stunning landscapes, cinematic bosses and intense gameplay. As well as shields and weapon enhancements, the game's power-ups include spells that unleash devastation on your opponents.



» [Amiga] *Uridium 2*'s final Dreadnought – Catalact – requires twitch-piloting combined with power-ups to overcome.

» [Amiga] *Uridium 2*'s animated end scene portrays the Manta docking on a skyscraper in a futuristic metropolis.

radar was a late addition, but it helped. During battle, it would be hard to monitor; it's more for a warning system. I then thought of a way of introducing ground jammers so that if one is acting you lose some of the radar, and two you lose the lot. That gave more purpose to targeting ground enemies – to stop the jamming."

As work on the sequel shifted from construction to tuning, feedback from the game's publisher, Renegade, caused Andrew no small amount of trouble balancing *Uridium 2*'s challenge. "Renegade was monitoring the game and was having trouble crashing into things. I think that was down to reckless speeding, but we had removed all the obstacles for the first couple of ships, which maybe made the game too easy [initially] because what you should learn quickly is that you can't hurtle around at full speed. The radar may have helped a bit so maybe we should've ditched the too-easy ship set."

Another concern was that the Dreadnoughts' visuals were taking far longer to produce than the game's code, with the result that Andrew had to arrange a deadline extension. "Working with multiple artists who have different ideas and skills can make it difficult to achieve a consistent look. There was a lot of work involved in producing a Dreadnought. We had some interesting, ideas come out, but that made colliding into the background even more likely. We ended up having to make the backgrounds very bold and obvious."

But by the autumn of 1993, work on *Uridium 2* was complete, and it was soon after released to glowing reviews. Although pleased with this response, Andrew was less happy with the game's sales and the fate of his enhanced versions. "The critical response was good, but the commercial response was poor. That could be down to many things, [but] I put everything into the game that I could. There was an exclusive A1200 SKU that had five bit-plane backgrounds rather than four, which gave us better looking shadows. We also added a few extra graphic fineries, whilst trying not to change the game itself. We also started on a CD32 version, but due to reasons beyond my control it didn't get completed. I wasn't happy about that."

Given hindsight, Andrew doesn't feel that he would change his game much, and his last few words on *Uridium 2* reflect justifiable pride. "There are little things that I'd change given infinite time and resources, but I got everything I wanted in. I think the difficulty spread across the whole game is a bit wide: it starts too easy and maybe gets a little tricky at the end. It's a testament to the game that it is still being played – it's been 23 years, after all. That's something to be proud of." *

Many thanks to Andrew Braybrook. You can find Andrew on Twitter @UridiumAuthor.



OVERKILL 1993

■ Effectively *Defender* taken to the next level, *Overkill* applies lavish AGA graphics and end-of-wave bosses to Eugene Jarvis's proven formula of blasting combined with rescuing colonists. *Overkill*'s satisfying power-ups and diverse battlefields add depth and replay value to the game.



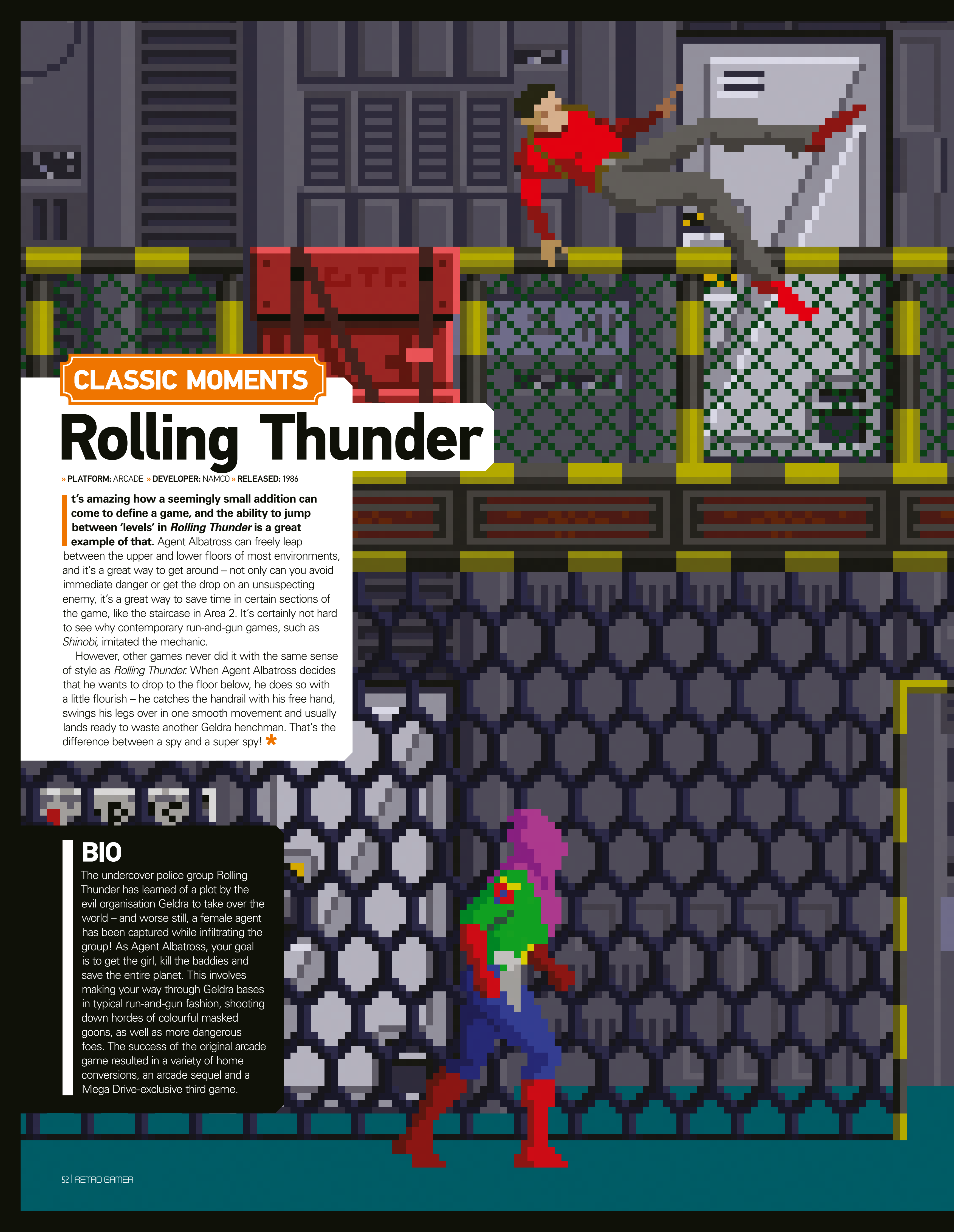
DISPOSABLE HERO 1993

■ Similar to *R-Type* in terms of aesthetics and pacing, *Disposable Hero*'s mechanics are genuinely unique. The game's challenge is to survive with meagre weapons long enough to collect blueprints and power modules, and then build, energise and implement more effective weaponry.



T-ZERO 1998

■ A late-Nineties Amiga tour-de-force released near the end of the system's commercial lifespan, *T-Zero* redefined what expanded A1200's could do. ClickBOOM's shooter delivers expansive play areas, teeming with organic aliens coupled with an exhilarating techno soundtrack.



CLASSIC MOMENTS

Rolling Thunder

» **PLATFORM:** ARCADE » **DEVELOPER:** NAMCO » **RELEASED:** 1986

It's amazing how a seemingly small addition can come to define a game, and the ability to jump between 'levels' in *Rolling Thunder* is a great example of that. Agent Albatross can freely leap between the upper and lower floors of most environments, and it's a great way to get around – not only can you avoid immediate danger or get the drop on an unsuspecting enemy, it's a great way to save time in certain sections of the game, like the staircase in Area 2. It's certainly not hard to see why contemporary run-and-gun games, such as *Shinobi,* imitated the mechanic.

However, other games never did it with the same sense of style as *Rolling Thunder.* When Agent Albatross decides that he wants to drop to the floor below, he does so with a little flourish – he catches the handrail with his free hand, swings his legs over in one smooth movement and usually lands ready to waste another Geldra henchman. That's the difference between a spy and a super spy! *

BIO

The undercover police group Rolling Thunder has learned of a plot by the evil organisation Geldra to take over the world – and worse still, a female agent has been captured while infiltrating the group! As Agent Albatross, your goal is to get the girl, kill the baddies and save the entire planet. This involves making your way through Geldra bases in typical run-and-gun fashion, shooting down hordes of colourful masked goons, as well as more dangerous foes. The success of the original arcade game resulted in a variety of home conversions, an arcade sequel and a Mega Drive-exclusive third game.

MORE CLASSIC ROLLING THUNDER MOMENTS

Machine Fun



Whenever you enter an 'Arms' door in *Rolling Thunder*, you'll be granted the use of a machine gun with limited ammo. It's the only power-up weapon in the game, but you should believe us when we say you won't need another – it's just so satisfying to mow down enemies, especially in later levels when they become deadlier.

A Good Hiding



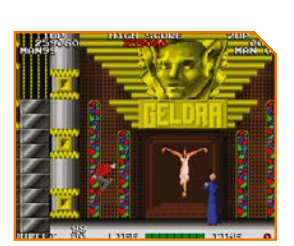
Doors aren't just good for picking up ammunition and machine guns – they can be a valuable safe place in times of desperation. Ducking into a door when an enemy attacks will shield you from harm, until you leave by releasing the joystick. Just remember not to linger too long, or the time limit will catch you out.

Man On Fire



Masked thugs and weird beast-men are one thing, but the Fire Man enemy literally has a burning desire to kill you dead. This pyromaniac leaps around the screen, intent on ramming you into the pit of fire below, with enough speed and erratic movement that he's often successful in his goal. Treat this enemy with extreme caution!

The Secret Lair



Rolling Thunder is no pushover, so it's fair to say that the sight of the Geldra base isn't likely to be a familiar one. Reaching it is a major achievement! However, there's still one task left between you and total victory, and that's the defeat of the evil Geldra leader, Maboo. Leila watches in the background – can you save her?



Bubsy 3D

How wild ambition, unfortunate timing and youthful ignorance led a brand-new studio to create – and survive – one of the worst videogames that was ever created

Bubsy, tapping his foot and staring cockily down from the blackened screen uttered his catchphrase, "What could possibly go wrong?" It was 1994 and with three videogames and a television pilot beneath his belt, the cartoon bobcat had every reason to feel confident. Staring back at him, equally self-assured, was an aspiring developer named Richard Ham. As one of Nintendo's 'Gameplay Counsellors', it was his job to know *Bubsy* – and dozens of other videogames – back to front; when eager kids phoned up, looking for help and advice, Ham was ready with solutions.

Perhaps that was why Eidetic, a startup studio based in Bend, Oregon, wanted to hire him. Its glossy billboards, dotted along Seattle's I-5 Freeway, promised young designers an exciting career in videogames. To Richard Ham, who'd taken the phone number down on a whim and couldn't believe when he got an interview, let alone a job, Eidetic seemed like the most promising studio in the world. But both it and its furry, unofficial mascot, had problems. The transition from Atari Jaguar to PlayStation, 2D to 3D, was proving a considerable



» [PlayStation] Low amounts of system memory forced Eidetic to create simple, cartoon-like textures.

"The writing was on the wall, and it wasn't very polite"
Richard Ham

challenge. Marc Blank and Michael Berlyn, who'd founded Eidetic using money from a database program written for the Apple Newton, needed more videogame programmers, coders and designers – Eidetic needed Richard Ham, his knowledge of *Bubsy* and his ability to produce answers.

Again, what could possibly go wrong? By the beginning of 1996, and with development of *Bubsy 3D* struggling and slowing, Eidetic was about to find out. "We knew we weren't going to do well," Richard says. "The writing was on the wall, and it wasn't very polite. But my perspective on making games was still being formed back then. This was a dream job. I was in my mid-twenties and wouldn't think twice about not leaving the building for four days straight – just push and push and push. I knew the game wasn't perfect but I took pride in doing everything the best I could, every step of the way. And at least there was passion. The worst thing to do is make a game that no-one cares about either way. But still, we crashed and burned. *Bubsy 3D* got slain. Some publications called it 'the worst videogame of all time.' I think of myself, today, as a *Bubsy* survivor."

Releasing in October, 1996, *Bubsy 3D* probably never stood a chance. Less than a month prior, the Nintendo 64 had launched in North America. Not only bundled with a new *Mario* game, but designed, specifically, to support third-person platforming – the N64's intuitive analogue stick was purpose-built to make *Mario 64* as responsive and fluid as possible. The PlayStation's D-pad, by comparison, was cumbersome and slow. There was a good reason that *Crash Bandicoot* – which also released a month before *Bubsy 3D*, just to compound the game's bad timing – was narrow and on-rails in its design: using the PlayStation controller to navigate big 3D spaces was an ordeal. And so Nintendo's new hardware, built precisely around quick and easy platforming, made *Bubsy 3D*, as soon as it launched, look antiquated.

The problems ran deeper than that, however. *Mario 64* was an impossible act to follow, but if the PlayStation's controller was limited to a D-pad, why fill *Bubsy 3D* with large levels in the first place? Eidetic's aspirations, Richard admits, were misplaced. "There wasn't really, when Eidetic started working on *Bubsy*, such a thing as a 3D platformer," he explains. "All we had for inspiration was another game on the PlayStation called *Jumping Flash*. *Jumping Flash* had very small levels, it was in first-person, it had *Doom*-style shooter controls and it had been well received, so we decided to try and build on it. 'Let's go third-person.' 'Let's have bigger levels.' 'Let's bring in stuff from the other ▶



MORE 3D HORRORS

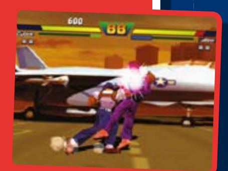
These games did not make the jump to 3D gracefully

FADE TO BLACK
DELPHINE SOFTWARE, 1995



■ A brave experiment, which laid the groundwork for all third-person shooters, *Fade To Black* nevertheless proves just how tricky 3D graphics were for developers raised in the 8-bit and 16-bit eras. Awkward and sluggish, it's outshone by its simpler-looking predecessor, *Flashback*, originally released for the Amiga.

STREET FIGHTER EX
ARIKA, 1996



■ Another botched transition from 2D to 3D, *Street Fighter*, the first time it shifted from pixelated to polygonal graphics, lost all its speed and nuance. It's hard to see what's going on, so instead of practising moves and executing them at the perfect time, you just hammer buttons, and wait for one rough 3D shape to fall over.

MORTAL KOMBAT 4
MIDWAY, 1997



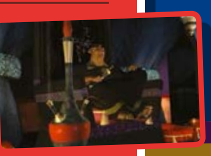
■ The Fatalities look good, but Midway, by its own admission, struggled working in 3D for the first time. Characters are slow and rigid. The camera moves in unpredictable ways. Where fighting games, particularly *Mortal Kombat*, live and die by their tactility and responsiveness, this one's too heavy, too slow.

SUPERMAN: THE NEW ADVENTURES
TITUS INTERACTIVE, 1999



■ As the world's most famous comic book hero, imbued with powers of invincibility, flight and light-speed, you inexplicably amble through a grey-green block city trying to beat arbitrary time trials. And that's all you do. Over and over. For hours. *Superman: The New Adventures* is pure, glowing fun kryptonite.

PRINCE OF PERSIA 3D
RED ORB ENTERTAINMENT, 1999



■ Even established games struggled with the transition to 3D; although *Prince Of Persia* later made a good effort on the PS2, its original foray into three dimensions features some of the ugliest character models and clunkiest controls in gaming history.





IN THE KNOW

» **PUBLISHER:** ACCOLADE
» **DEVELOPER:** EIDETIC
» **RELEASED:** 1996
» **PLATFORM:** PLAYSTATION
» **GENRE:** PLATFORMER



DEVELOPER HIGHLIGHTS

SYPHON FILTER
SYSTEM: PLAYSTATION
YEAR: 1999
SYPHON FILTER 2
SYSTEM: PLAYSTATION
YEAR: 2000
UNCHARTED: GOLDEN ABYSS (pictured)
SYSTEM: PS VITA
YEAR: 2011

Bubsy games, like the humour and the *Loony Tunes*-style visuals.' 'Let's make it really high resolution.' We had a higher resolution than anything on the PlayStation at the time, and we suffered hugely for making that decision. We went for hi-res as opposed to lots of textures, because no-one else was doing super-high resolution, and that's why the game has a stark look. Major portions of it are untextured, because all the memory was committed to the resolution.

"That was the biggest hurdle, memory," Richard continues. "We couldn't build what we wanted to build, we couldn't draw what we wanted to draw. On our development kit *Bubsy* would work fine. But on the retail kit, which was comparatively an anaemic piece of crap, it didn't. If you saw the in-house build, all the crazy colours and chequered walls looked great together. But on the PlayStation that was impossible - there was no way the engine would support it. So we had to bring in the fog, and then bring in the fog, and then bring in the fog. It destroyed the sensation."

Eidetic, however, had other priorities. Rather than focusing on *Bubsy*'s central problems, the studio had already started work on a port of the game for the Sega Saturn. At the same time, it was beginning preproduction on its next full development project and building a prototype for a *Bubsy* sequel. Accolade, *Bubsy 3D*'s publisher, refused to grant more time and seemed uninterested in the game's struggles. Eidetic, similarly, became oblivious to its own undoing.



» [PlayStation] Where *Mario 64* used an intuitive analogue stick, *Bubsy 3D* was controlled using the PlayStation's D-pad.

> **"We couldn't build what we wanted to build, we couldn't draw what we wanted to draw"**
> Richard Ham

"We'd made these huge levels, which the tech just couldn't handle, and lifted controls from *Jumping Flash*, so it was slow and plodding," says Richard. "But what really killed any chance of *Bubsy 3D* being any good was the fact it was developed for both the PlayStation and Sega Saturn at the same time. The Saturn was a noose around our programmer's necks – compared to the PlayStation it was significantly weaker, and it was only when that version was cancelled, at the 11th hour, that we could get back on track.

But not only had Eidetic been working on *Bubsy*, for two different hardware platforms, it had also been making a game called *Jumper*," Richard continues. In a post-apocalyptic world where humanity had been overtaken by robots, players could project themselves – could 'jump' – into the minds and behind the eyes of different enemies. It was a great concept, but we were trying to make it using the same engine as *Bubsy*, an engine that was being built for two separate platforms which were incompatible with one another. Eventually Accolade told us to put *Jumper* on the shelf and focus on *Bubsy*, but they probably should have done it a lot sooner. The whole thing was just insane. I don't think I'd call it hubris. I'd just call it ignorance."

Despite everything, Richard and Eidetic managed to inject into *Bubsy* a couple of smart ideas. Originally, the little atom symbols scattered around levels were programmed to bounce off of Bubsy when he touched them and collide with another, creating pretty but ultimately non-interactive patterns. Richard had the idea of letting players pick the atoms up, enter a pseudo first-person aiming mode and shoot them like a gun, a small iteration that gave players a greater sense of control. A

TRULY TERRIBLE GAMES More releases that should have never seen the light of day



SQIJ!
ZX SPECTRUM, 1987

■ Imagine spending two pounds of your pocket money on the latest budget release, only to find it didn't work. That's exactly what happened with Jason Creighton's Spectrum port, thanks to a bizarre POKE in the original game.



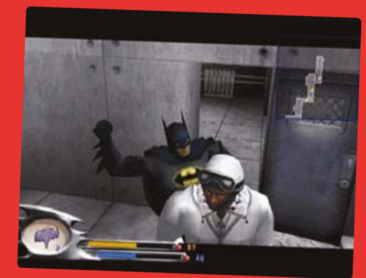
RISE OF THE ROBOTS
VARIOUS, 1994

■ This awful fighting game was hyped to high heaven on release, thanks to its admittedly impressive visuals. It received a completely different reception once released, thanks to its naff animation and lacklustre combat engine.



WATERWORLD
VIRTUAL BOY, 1995

■ Critically scorned on release, this turgid effort is widely regarded as the Virtual Boy's worst game. It looks ugly as hell with eye-straining visuals, while the gameplay is dull as ditchwater and incredibly derivative.



BATMAN: DARK TOMORROW
XBOX, GAMECUBE, 2003

■ Despite having a development time of four years, HotGen's game was an absolute mess and critically panned. Slammed for its poor camera and weak gameplay mechanics, its reception was so bad a planned PS2 port was canned.



» [PlayStation] Quantity of enemies was more important than quality, but those sheer numbers slowed *Bubsy 3D* to a crawl.

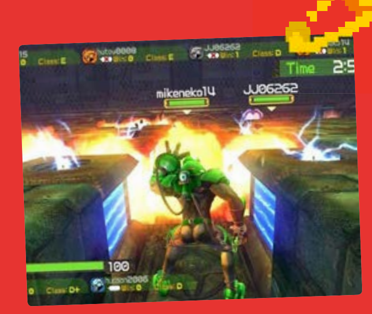
two-player mode was created, also, wherein one person controlled Bubsy while another shot atoms at him like a sniper. They couldn't save Bubsy from a critical mauling, but Richard and Eidetic were laying the foundations for a much more successful third-person action game.

"It was dark after *Bubsy*," says Richard. "It hurt, getting those 'worst game of all time' remarks. Accolade fired us. There were lay-offs. The game almost killed Eidetic. But we were a small team, and that helped. There was a lot of gallows humour. We focused on the little successes. In the meantime, we were out there, talking to any publisher who would show us the door, promising them we'd learned our lesson. We had that prototype for the *Bubsy* sequel, where we'd tuned the controls on the PlayStation's D-pad to mimic, best as we could, the movement in *Mario 64*. It looked great. Sony got interested and we signed to do *Syphon Filter*. Marc Blank and Mike Beryln [Eidetic's founders] gave pep talks and we decided Accolade were assholes! We'd been through Hell together but we'd landed."

To date, *Bubsy 3D* is the last game in the *Bubsy* series. Tommo Inc., a California-based company which bought the franchise rights from Atari in 2014, released, one year after *Bubsy 3D*, *Bubsy Two-Fur*, a compilation of *Bubsy* and *Bubsy 2*. Other than that, the once boastful bobcat has been consigned to gaming history. More than 20 years since it first released, opinion toward *Bubsy 3D* hasn't changed, and it still regularly tops lists of the worst videogames ever.

However, after scoring multiple hits with the *Syphon Filter* series, Eidetic was folded into Sony. Renamed SIE Bend, it created two *Uncharted* spin-offs for the PlayStation Vita and is currently producing a zombie survival game, called *Days Gone*, for the PlayStation 4. Richard Ham moved to Splash Damage and served as creative director on 2011's *Brink*. He has since retired from game-making - the industry of today, he says, is even tougher than in the Nineties.

"I don't blame anyone," he concludes. "We did the best we could and tried to carry through with decisions that had already been made. Maybe the rest of the team wants to just forget it and never bring it up again, but I'm still proud of *Bubsy 3D*. I never stopped being proud of it. At that time, the young kids in their twenties writing reviews for magazines didn't have any idea about what went into making games. To them, their responses were justified. To us, it was bullshit and *Bubsy* deserved better. Today, things are even more cut throat. Hello Games decided to buck the odds, try the impossible, and it didn't work out, so we'll see what happens with them. But personally I'm out. I'm done with that shit." *



BOMBERMAN: ACT ZERO

XBOX 360, 2004

■ It's astonishing how much Hudsonsoft dropped the ball with this Xbox 360 exclusive. It looked ugly as sin, while the weak graphics, long loading times and poor collision detection had reviewers spitting feathers.



SONIC THE HEDGEHOG

VARIOUS, 2006

■ When Sonic falls, he falls hard. Alongside the awful *Sonic Battle*, this is widely regarded to be one of the worst games in the series and with good reason. It's a horrible experience to play with one of the worst cameras in gaming.



TOP 20 apple II GAMES

The Apple II was designed for games – creator Steve Wozniak wanted it to play Breakout. But far richer Apple II gaming greatness abounds, as Craig Grannell reveals...



20 Taipan!

■ PUBLISHER: **Avalanche Productions**
■ GENRE: **Strategy/trading sim** ■ YEAR: **1982**

Essentially a watery *Elite* on the high seas of the 19th Century, *Taipan!* has you start life with cash and a debt – or a boat with guns but no money. You then sail between seven ports, taking on pirates for their booty, and dealing in silk, arms and opium. It's all very simple and text-oriented, but still rather tense when facing off against 20 pirate ships, or worrying your illicit cargo might be confiscated.



19 Flight Simulator

■ PUBLISHER: **subLOGIC**
■ GENRE: **Simulation** ■ YEAR: **1979**

You won't swoop over photorealistic landscapes in *Flight Simulator* – instead, you get a limited map with basic wireframe graphics. But Bruce Artwick's game nonetheless deserves a place on this list, through kicking off a series that continues to enthral. And if you fancy something a bit more advanced on the humble Apple II, *Flight Simulator II* substantially ramps up the complexity and visuals.



18 3D Docking Mission

■ PUBLISHER: **The Elektrik Keyboard**
■ GENRE: **Arcade** ■ YEAR: **1978**

In the early days of the Apple II, games typically weren't nuanced. Even so, many were creative, as Christian Oberth's *3D Docking Mission* proved. The aim is simple: guide your craft through an asteroid field and dock with a mothership. But matters are complicated by limited fuel, comets unhelpfully streaking towards you, inertial movement, and a split-screen view that forces you to think in 3D.

17 Raster Blaster

■ PUBLISHER: BudgeCo ■ GENRE: Pinball ■ YEAR: 1981

In an era of realistic pinball titles such as *Pinball Arcade*, hyper-realistic animatronic fare like *Zen Pinball*, and creative takes on pinball like *PinOut* and *INKS*, *Raster Blaster* looks positively archaic. But in the history of pinball titles – and also Apple II games – this Bill Budge-designed table is hugely important.

Prior to *Raster Blaster*, videogame pinball had a tendency to either get smashed into other genres – such as *Gee Bee*'s weird mash-up of pinball and *Breakout* – or end up not looking or playing like pinball at all, as evidenced by the risible *Video Pinball* on the Atari.

Raster Blaster was different. Here was a title that – within the limitations of the Apple II's hardware – wasn't trying to be an arcade game that happened to include flippers and bumpers. This was a simulation.

The table was broadly inspired by real-world table Firepower, and was oriented vertically. Although that resulted in over half the screen being given over to high scores and logos, this added to the realistic nature of the table. Mostly, though, *Raster Blaster* impressed due to the feel of the game. Yes, modern eyes will spot clear shortcuts in the game's physics, and some odd ball movement here and there, but *Raster Blaster* sat head and shoulders above its contemporaries. And even today, Bill's game plays a decent game of pinball that doesn't feel too far removed from the real thing.

Post-*Raster Blaster*, videogame pinball was changed forever, and gamers soon got to enjoy the likes of *Night Mission* (by Bruce Artwick) and *David's Midnight Magic*. Bill himself pushed the pinball genre even further, eschewing the idea of further standalone tables and enabling players to craft their own in the ambitious – and rightfully highly-acclaimed – *Pinball Construction Set*.

RASTER BLASTER

PINBALL WIZARD

Bill Budge on the Apple II and Raster Blaster



What was it that originally attracted you to the Apple II?

Colour. That was the thing that swayed me from buying a TRS-80, or one of the other small business machines coming to market back then. But it took me about two months to get hold of one – there weren't many resellers in those days!

How did you find the machine for programming games?

Architecturally, the Apple II was very simple and open, so programmers could do things that probably weren't foreseen by Steve Wozniak. But audio on the system was extremely primitive – it was really hard to make sounds because there were no timers or interrupts. Still, the Apple II did at least have the most reliable floppy drive of those early home machines. The ones on the C64 and Atari were a nightmare.

What was the genesis of *Raster Blaster*?

Oddly, I was never really a pinball player before I started that game. But I was working at Apple in those days, and my colleagues were obsessed with pinball. I'd go to lunch with them, and they explained how pinball worked. Since I wanted to make the most amazing looking game I could on the Apple II, pinball seemed like the ideal fit.

Presumably, you didn't find inspiration from other videogames in those days?

Not really. There were a few other pinball games around at the time, but they had low resolution graphics and limited physics. And I'd, in fact, already made a simple pinball game by then, using code and techniques from my version of *Pong* on the Apple II. My biggest inspiration was Williams' *Firepower* – one of the all-time great pinball tables – on which I based the *Raster Blaster* table layout.

What technical challenges did you encounter when making the game?

The Apple II couldn't multiply natively or do floating point math. So a lot of effort went into using 16-bit fixed-point numbers to do things like update position and velocity, and rotate vectors when balls hit something at an angle. I used table lookup to calculate sines and cosines for rotating things in two dimensions.

Collision detection was also tough, and involved me constructing, by hand, a database that for each row of pixels on the screen listed the wall properties – material, position, and rotation – relative to the x-axis, which was constantly compared to the ball's position. My hand-coded table scheme probably accounted for half of the effort to build *Raster Blaster*!

Image: © Jason Scott



16 Mystery House

■ PUBLISHER: **On-Line Systems**
■ GENRE: **Text adventure** ■ YEAR: **1980**

This game's cover art might put you in mind of *Scooby Doo*, but there are very real horrors lurking within this mansion. After venturing inside (using GO DOOR, due to the clunky early Eighties parser), you find yourself locked in, alongside several others. Soon, the number of people starts diminishing, and you find bodies lying around, having been dispatched in various nasty ways.

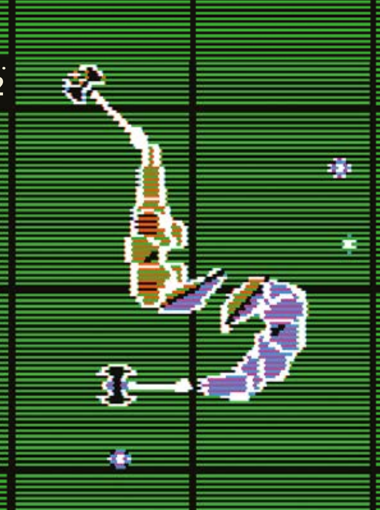
Developed by husband-and-wife team Ken and Roberta Williams, *Mystery House* was a pioneering adventure, in providing imagery alongside the text. Often, solutions are based around what you see rather than just what you read. And although *Mystery House* isn't that sophisticated and is full of dead-ends, it's a fascinating bridge between *Colossal Cave Adventure* and the graphical adventures that would become prevalent in the PC era.

15 The Bilestoad

■ PUBLISHER: **Datamost** ■ GENRE: **Fighting** ■ YEAR: **1982**

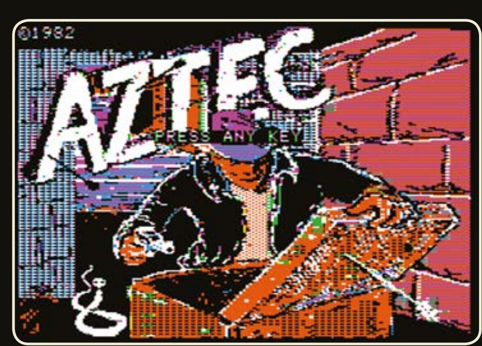
It's fair to say this Marc Goodman combat game is an oddball. Without a great deal of other fighting games to draw on, Marc decided on a top-down viewpoint. So rather than the subsequently typical side-on approach, *The Bilestoad* has you duff up opponents from above.

The controls are quite involved, and take time to get to grips with. Along with keys for turning, stopping and walking, you can move your axe and shield independently. The arenas you fight in add further complications by way of teleporters and speed-up discs. If it all gets a bit too much, pit two 'robots' against each other and settle back to enjoy the fight.



14 Aztec

■ PUBLISHER: **Datamost** ■ YEAR: **1982** ■ GENRE: **Platformer/adventure**



There's a lot going on in *Aztec*. It resembles yet another side-on arcade adventure, with a fedora-wearing kleptomaniac looking to 'liberate' bling from a deadly tomb. But the controls are, frankly, a bit mad – the system has separate keys for everything from running and climbing stairs to drawing a gun and rummaging around in a chest. Wrap your fingers around that lot and you still have to contend with monsters and environmental issues – clambering up garbage, blowing up walls, and not drowning in water. And even if you succeed in your quest, a repeat's not assured – the tomb's randomly generated every time you play.



13 Sabotage

■ PUBLISHER: **On-Line Systems** ■ GENRE: **Shoot-'em-up** ■ YEAR: **1981**

You might well take a look at *Sabotage* and think: "That looks an awful lot like *Paratrooper*". And you'd be right. This game by Mark Allen has you control a gun turret at the foot of the screen while helicopters scoot about, dropping paratroopers. Should four reach the bottom (with you having likely dispatched many of their comrades), they form a human pyramid, leap aboard the turret and blow it up. Which all seems a bit elaborate and wasteful as a means of attack, but this is the world of videogames. And as for *Paratrooper*, it was *Sabotage* that came first.

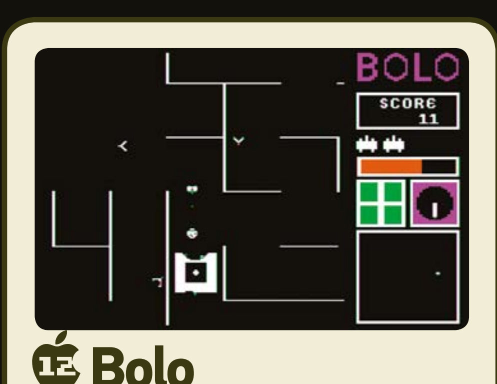












12 Bolo

■ PUBLISHER: **Synergistic Software**
■ GENRE: **Shoot-'em-up/maze** ■ YEAR: **1982**

'Sparse' is probably the word that first comes to mind on entering *Bolo*'s strange universe. On selecting a difficulty level and density, the game generates a simple maze containing enemy bases. Your aim is to trundle about, blow away enemy craft, and obliterate each of the bases by chipping away at its walls before firing on its core. Inexplicably, blowing up a base boosts your fuel reserves. Handy.

But what sets *Bolo* aside from most old-school arcade games is the controls. Your tank can fire while you're retreating at speed, and you can also turn the turret and shoot at an angle to your current direction of movement. That precision particularly pays dividends on higher levels, where previously sluggish enemies start moving as fast as you.



11 Choplifter

■ PUBLISHER: **Brøderbund** ■ GENRE: **Arcade** ■ YEAR: **1982**

In 1980, arcade classic *Defender* introduced the idea of rescuing hapless civilians from a warzone while you blasted away at everything in sight. But its pyrotechnics and sci-fi trappings meant it always felt very much like an arcade game. By contrast, *Choplifter* – while entertaining and compelling – is comparatively bleak. You pilot a helicopter behind enemy lines, braving tanks and fighter jets, and blast buildings to free hostages. You must then land, grab as many hostages as you can, and make for safety. On each return, your enemy ramps up its defences, making subsequent trips increasingly perilous.

You're not rewarded for blowing up enemies – the score simply lists hostages in your helicopter, those saved, and those that have perished. And should the last of your choppers be shot down, it sits at the bottom of the screen in flames as the game states 'The End'.



FLYING HIGH

Dan Gorlin recalls his Apple II days creating classic title Choplifter



Why did you start working with the Apple II, and how did you find using the machine?

I started working with it because I had one! My grandfather loaned me his when I was selling a house, and, in all honesty, I wasn't really a fan. I found the machine very primitive. But I did like the fact you had complete control over the timing, so you could polish that aspect of whatever you were programming perfectly.

How did you start working on *Choplifter*?

When I was selling that house, I started goofing around with the Apple II – moving things around the screen. I'd been interested in helicopters, so I'd got one on the screen, and was trying to get the feel of flying right. In the end, I had to cheat with the physics to make it fun, but I think I succeeded in my aim of making it feel like a natural thing to play with for the player.

The key element of *Choplifter* is rescuing hostages. How did that idea come about?

This kid working on my car was a big fan of *Defender* and suggested I should add some people to rescue. So I walked to the nearest place with a *Defender* cabinet, liked the rescue element, and started adding all kinds of little bits to my game. And at some point, I realised I could make some money out of it!

This was around the time of the Iran hostage crisis. Did that play into the topical nature of the game?

That was big in the news at the time and probably influenced the hostage aspect of the game – at least subliminally. But I wasn't really thinking too much about it, and that probably resulted in *Choplifter* being fun rather than overly serious.

Even so, there is an earnest undercurrent in the game, not least with the score, which merely lists survivors and deaths.

I don't like the idea of a score when what you're really trying to do is tell a story. So I didn't want you racking up points like in *Defender*. All that was important was knowing how many of the hostages got home safely. To me, the number of planes and tanks you blew up getting your people home was irrelevant, and so I didn't keep track of that. The only reason the enemies were there was to push the player through providing them with challenges as they played the game.



10 Airheart

■ PUBLISHER: **Brøderbund**
■ GENRE: **Arcade** ■ YEAR: **1986**



This ambitious 3D arcade title finds you zooming about a watery world, blowing up robots, and grabbing mystical objects that allow you to enter a final battle. It was later enhanced significantly for 16-bit machines as *Typhoon Thompson In Search For The Sea Child*.

9 Karateka

■ PUBLISHER: **Brøderbund**
■ GENRE: **Fighting** ■ YEAR: **1984**



Jordan Mechner's debut turned out to be a cinematic take on fighting games. Along with all the brawling, cutscenes are peppered throughout, showing the antagonist ordering his minions into battle, and the hero's love awaiting rescue.

8 Captain Goodnight And The Islands Of Fear

■ PUBLISHER: **Brøderbund**
■ GENRE: **Arcade** ■ YEAR: **1985**



This *Bond* parody side-scroller comes with a healthy dollop of snark. Captain Roscoe 'Buzz' Goodnight battles his way to a doomsday device by way of foot, jet, jeep, tank and submarine, in a series of tough arcade sequences.

7 SunDog: Frozen Legacy

■ PUBLISHER: **FTL Games**
■ GENRE: **Space exploration** ■ YEAR: **1984**



Although joystick-controlled, *SunDog* feels like a precursor to PC-based mouse-oriented strategy fare. As Zed, you zoom about space, visit cities and trade. It's slow going, but an ambitious, engaging title.

6 The Bard's Tale

■ PUBLISHER: **Electronic Arts**
■ GENRE: **RPG** ■ YEAR: **1985**



This RPG classic started out on the Apple II before being converted to many other systems. The emphasis on simple exploration, combat, and puzzles means that although it seems unsophisticated today, it's still worth playing.



Ultima I: The First Age of Darkness

■ PUBLISHER: Origin Systems ■ GENRE: RPG ■ YEAR: 1981

We could have included a later *Ultima* entry in this list, and if you're a fan of role-playing games, you should probably play them all anyway. But we're going for *The First Age of Darkness* on the basis it was one of the most influential titles to grace the Apple II.

The game dumps you in a mystical realm where an evil wizard's enslaved everyone. It turns out, that this villain has got hold of the suitably (if unimaginatively) named Gem Of Immortality, meaning he can't be killed as his minions go around getting all stabby. Your aim: end his rule. No pressure.

From a visual standpoint, *Ultima* was ambitious for a 1981 game, switching between top-down roaming views and first-person dungeons. But, mostly, *Ultima* is important for generating the language used in so many subsequent RPGs. By the time the third *Ultima* arrived, you could select a party, and delve into a turn-based combat 'battle screen' when scrapping. It and *Ultima IV* are usually cited as best-in-class on the Apple II; but, hey, we're **Retro Gamer**, so check out where it all began first.



DUNGEON MASTER

Ultima creator Richard Garriott fondly remembers his Apple II days



What was it that grabbed you about the Apple II?

I started out with a teletype terminal connected with an acoustic modern to a PDP11 in a neighbouring university's data centre. When the Apple II arrived, I was in wonder. Instead of invoking a command and waiting minutes for it to process, it could, in real-time, visually display to me all the fantasy worlds and other fantastical ideas I could think about to program. I immediately saw it as the key to the future – or my own future, at least.

How instrumental was the Apple II in *Ultima*'s creation?

I think without the Apple II, *Ultima* never would have existed. As much as I enjoyed what came before and the other computers around at the time, I found all those systems comparatively harder and less fulfilling to tear into than the Apple II. With the Apple II, you could dive right in under the hood and figure everything out. You could kind of keep the totality of it in your mind, and truly master the entirety of the machine.

How did *Ultima* come to be?

I was working in a computer store, and the owner noticed me working on a game in the back, *Akalabeth*. I'd converted it from a teletype version, but added first-person corridors, so you could see them from your point of view. The guy running the store said it was better than anything else out there and that I should publish it – and so I did. It then came to the attention of national distributors, but really *Akalabeth* was a technical demo. There's no story, no winning and no end. But it put me through college, and that was when I started the first *Ultima* game. I thought that if a game I never intended anyone to see – much less pay for – could put me through college, surely I could start over and do a much better job with one designed for public consumption!

What's your relationship with the Apple II today?

As PCs took off and the Apple II became antiquated, I didn't pay much attention to mine. But then I was knocked by a keynote speech I saw that said these machines were 'disappearing' into obsolescence, meaning the best games could be lost and forgotten. I realised I had no way to look at my *Ultima* games or *Akalabeth* – these years were lost to me. More recently, of course, emulation has closed the gap, but after that conference, I worked with my Apple IIs, and went on a buying binge for spare parts, to ensure I could keep them operational indefinitely.

4 The Oregon Trail

■ PUBLISHER: Brøderbund ■ GENRE: Simulation ■ YEAR: 1979/1985

Speccy has dysentery.

Date: May 20, 1848
Weather: hot
Health: good
Food: 265 pounds
Next landmark: 70 miles
Miles traveled: 760 miles

Although primarily an educational title, *The Oregon Trail* also happens to be one of the least-forgiving classic-era Apple II games you're likely to play. It finds you regularly making life-or-death decisions. In essence, it's an early take on resource management – and it's also the only game of its day that abruptly wipes out one of your travellers with a nasty case of dysentery.

Perhaps surprisingly, despite *The Oregon Trail* being widely associated with the Apple II, it in fact started life on a mainframe computer, way back in 1971. Creator Don Rawitsch made the game available on the Minneapolis Public Schools time-sharing service, opening it up to many thousands of students – revolutionary at the time. The game was rewritten for the Apple II in 1979 as *Oregon*, and then reissued and revamped in 1985 as *The Oregon Trail*, with vastly improved graphics, along with expanded hunting and shooting elements.

2 Lode Runner

■ PUBLISHER: Brøderbund ■ GENRE: Platformer ■ YEAR: 1983

Much like *The Oregon Trail*, *Lode Runner*'s history goes beyond the Apple II. The game began life on the Commodore PET, as a project cocreator James Bratsanos referred to as being about the "beauty of the algorithm". In essence, his system was designed to be thrown at any designed level rather than being about pure gameplay. But even this early take was recognisably *Lode Runner* – platforms and ladders; and a hero chased by enemies you could trap by digging holes left or right of your current position.

At university, the game was converted to VAX, whereupon Doug Smith got involved – and at the insistence of his nephew rewrote the game for Apple II.

After buying the rights from James, Doug's first crack at the Apple II version, *Miner*, was rejected by Brøderbund. But a major revamp with superior controls and pixel-level motion resulted in the classic game we know and love today.

SCORE0009100 MEN007 LEVEL05

COME HERE !

3 Beyond Castle Wolfenstein

■ PUBLISHER: Muse Software
■ GENRE: Stealth ■ YEAR: 1984

No, not *that* Castle Wolfenstein, although this Muse classic served as inspiration for the hugely-influential PC 3D shooter. Here, you're stealthing it up in a Nazi bunker, aiming to locate a bomb, dump it outside the room where Hitler's holding a meeting, and legging it before the thing explodes. Like its similarly excellent – and pioneering – predecessor, *Castle Wolfenstein*, this game marries action and strategy. Sure, you can shoot enemies, but doing so wastes ammo. You can alternatively pull a gun and pilfer a guard's kit, or even stab a soldier, wear their uniform, and saunter about in disguise.



Prince of Persia

■ PUBLISHER: Brøderbund
■ GENRE: Platformer ■ YEAR: 1989

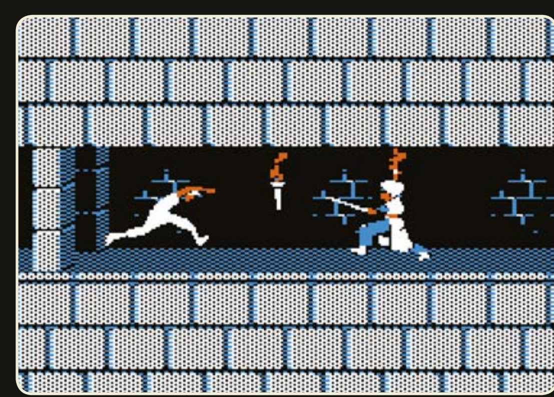
Several games on this list are from the early days of the Apple II, when creators were first experimenting with the system. But it's hard to see how any title could have topped our list other than Jordan Mechner's platform adventure. It was, without doubt, a late entry to the Apple II, not finding release until 1989, by which point even Jordan himself admits the platform was dying. His reason for sticking with it? "The Apple II was a platform I understood – a machine you could push," he explains. "And that was satisfying… It was a lovely machine."

Taken at face value the component parts of *Prince Of Persia* don't scream classic. The plot is hackneyed, involving a heroic protagonist battling his way to defeat an evil wizard. And the gameplay is, at its core, a conventional platformer, where you leap about, throw switches to open doors, and try to not end up impaled on spikes some lunatic's left sprinkled about the place.

It's a good thing, then, all the great stuff happens on the screen. In short, *Prince Of Persia* is all about the execution. Everything within the game has been honed to perfection. The visuals are superb, with rotoscoped animation that affords the protagonist and other characters a lifelike fluidity. The introductory animation nudges the game into cinematic territory, and composer Tom Rettig even managed to get a decent score out of the Apple II's woefully-underpowered sound chip.

In terms of gameplay, *Prince Of Persia* similarly shines. Whereas many retro platformers are crude in terms of controls, bar the odd bit of inertial movement, *Prince Of Persia*'s hero can run, duck, leap across gaps, pick his way across the floor and hang from ledges. You need to know precisely when to make use of an action, and soon come to realise the entire game's effectively one massive puzzle, relentlessly trying to off the hero.

Then there are sword fights that punctuate the platforming action – and puncture the hero, if you're a bit rubbish. There's a clever mix of infinite lives and 60-minute timer – the princess will be glancing nervously at her timepiece if you keep getting killed, given that each death plonks you at the start of the current stage. And then there's a section where you leap through a mirror only to be confronted by an evil apparition twin. Now *that* kind of thing definitely didn't happen in the likes of *Impossible Mission*…



FIVE REASONS IT'S GREAT

1 Like *Karateka*, *Prince Of Persia* is infused with a distinctly cinematic feel, not least with its animated filmic intro.

2 From huge leaps to little wobbles on hitting unstable ground, the protagonist's movements add a sense of realism to the game.

3 Nuanced controls give you a fighting chance against the game's pixel-perfect demands: you can leap, take careful steps, or hang from platforms.

4 The game's platform larks and exploration are punctuated by swordfights. These look great and also ramp up the tension.

5 The Apple II's sound chip wasn't a force to be reckoned with, but this game actually has a decent score.



MAKING A MASTERPIECE

Jordan Mechner talks us through the development of Prince Of Persia

Tell us about the origins of *Prince Of Persia*.
I loved the first ten minutes of *Raiders Of The Lost Ark*. That kind of running, jumping action where you feel like the hero is in great danger and escapes by the skin of his teeth was what I wanted to recreate. I wanted to bring that excitement to gaming, to the Apple II platform. It was a machine I was really getting to grips with and it was the most natural thing for me – as an amateur animator, film fan and gamer – to try to do.

Tell us about the rotoscoping techniques…
Rotoscoping was a technique I first used in *Karateka* and it's basically something animators have been doing since the very early days of film. For *Prince Of Persia*, I videotaped my brother running, jumping, and doing lots of other things, then went through a process to select frames and transfer them in silhouette to the computer. The hard part then, as now, was to integrate the animations into the game in a way that struck the right balance between responsive controls, and fluid animations that look good visually.

Why choose an Arabian theme for your game?
The *Prince Of Persia* story came out of a desire to find a distinctive setting that wasn't already familiar from other games. A lot of games had sci-fi or medieval, sword-and-sorcery settings, but the *Arabian Nights* theme hadn't been done in a long time – this was a few years before Disney's *Aladdin*. And it was a good fit for the kind of character I wanted to create – your basic plucky underdog who's totally outnumbered and outgunned.

Why did you include sword fighting sections?
I wanted to get that back-and-forth, classic Hollywood-sword fighting feel, where the blades clash high and low in a kind of balletic rhythm. The model was the climactic fight, in the 1938 film version of *Robin Hood*, between Errol Flynn and Basil Rathbone. If you play the DVD in freeze-frame, you can spot the animation frames I used for *Prince Of Persia*.

Was there anything you planned that didn't appear in the final game?
Part of my original plan for *Prince Of Persia* was to include the level editor on the disk, so players could create their own *Prince Of Persia* levels. I spent months creating a full-featured level editor – but in the end, the only person who got to enjoy using it was me.

Were you pleased with how it turned out?
I think what surprised so many was the fact that the Apple II at the time was an old platform. By the time I'd finished *Prince Of Persia* in 1989, the computer was more than ten years old. I felt at the time – and I still feel this now – that the first *Prince Of Persia* definitely moved up and even surpassed the hopes that I'd had for the game in the beginning, when I first conceived of it in 1985. But at the same time I was really starting to see other games and other platforms that could go beyond it, technically, in terms of what it was capable of, so in that sense I felt like I was kind of trying to keep up with the market that was evolving even as I was programming the game.

Were the ports crucial to the game's success?
It's thanks to the various ports that *Prince Of Persia* is still remembered today. A few years later, the PC port was done by an internal Brøderbund team with Lance Groody as programmer, and it took full advantage of what the PC could do including VGA graphics, sound and music. The Mac version went further, with different versions of the graphics for every type of Mac screen. The original version didn't sell many copies, because the Apple II was a dead platform by the time the game released in 1989.

Hardware Heaven

Super Famicom fact

■ David Sheff's *Game Over* revealed that Nintendo decided to start shipping its consoles at night to avoid increasing interest from the Yakuza.

RAM: 128KB (CPU) 64KB (VIDEO RAM)
PROCESSOR: 3.58 MHZ
MEDIA: CARTRIDGE
AUDIO: 8-CHANNEL ADPCM AUDIO
COLOUR: 32,768
DISPLAY MODE: 256x224-512x448

EDITOR'S CHOICE



Axelay

Let's face it you're pretty spoilt for choice when it comes to choosing definitive SNES games. We're picking *Axelay* for a number of reasons and not just because Darran loves shmups. It's not only a brilliantly-crafted game from a company at the height of its powers, but also proved that Nintendo's console was more than capable of chucking a large number of sprites around without causing itself to have a seizure. Oh, and it featured the sort of stunning Mode 7 effects that caused Amiga and Mega Drive owners to clench their fists with rage and wish that Santa had delivered them a different games system for Christmas.

Super Famicom

» MANUFACTURER: Nintendo **» YEAR:** 1990 **» COST:** Launch: ¥25,000 (approx £200), Today: £40+ unboxed

Sometimes it's not always fashionable to be late to the party. By the time Nintendo's follow-up to the Famicom hit Japan its competitors, NEC and Sega, had a big head start on the fourth generation.

Designed by Masayuki Uemura, the same genius who created the NES, Nintendo's 16-bit console was immediately met with great success in its native Japan, with its first 300,000 units selling out within hours. Despite only launching with two titles, *Super Mario World* and *F-Zero*, both were well received and a large number of third-party publishers ensured that the Super Famicom would be supported in the following months and years.

Interestingly, the console had a bigger fight on its hands in the West, as Sega had been finding far more success overseas, thanks to its aggressive marketing which led to the now-infamous 16-bit console wars. Indeed, Sega's doggedness and aggressive tactics saw it briefly gain a large share of the console market at one time (a first for the company since Nintendo first entered the fray with the NES). It wasn't to last for Sega, though, and by the end of the console generation the sheer prolific diversity of Nintendo's 16-bit system saw it win the war with over 14 million more sales then that of Sega's machine.



bubble bus

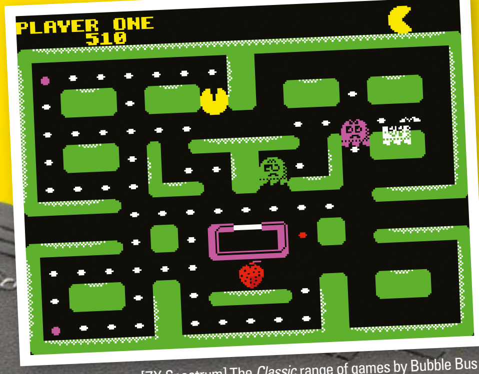
Bubble Bus arrived early in videogame history and it made some decent inroads in the 8-bit market. David Crookes hails Mark Meakings and Paul Midcalf to talk about this oddly-named developer and publisher

Back in 1982, a schoolboy walked up to Mark Meakings with a cassette in his hand containing a game he'd written in his spare time. "I have a hard job picturing him, let alone remembering his name," he says of the young chap. But it was all the businessman needed to be inspired to set up a new software house, with the aim of breaking into the still fledgling videogame market.

Mark was certainly familiar with computers. He had started his career as a City-based mainframe programmer and he had created the first commercial micro dealership in Kent. Although he also used to fly for British Airways as cabin crew, he had a great handle on business. At the age of 23, he had created a chain of recruitment agencies.

His computer shop, though, was doing very well indeed. He'd set it up at the turn of the Eighties and its staff of 15 sold Commodore business systems and Apple computers. "I can remember going up to Milton Keynes where the Apple distributor was and I'd watch these guys putting 8K memory upgrades into Apple IIs and things like that," he says. "That got me excited so I just carried on with that."

Called The Computer Room, his shop sold the first Apple IIs and Commodore PETs. But he had a feeling the success wouldn't last forever. With more businesses becoming aware of the money to be made in selling computers and price wars looming, he was receptive to fresh ideas. "This lad came in with a game written in machine code and he said there was this thing starting to happen with games," Mark says. "He showed me what he'd made and I felt there was an opportunity for a new business and leapt into it. It was a very exciting time. Everything was so new."



» [ZX Spectrum] The *Classic* range of games by Bubble Bus saw the release of a *Pac-Man* clone called *Classic Muncher*.

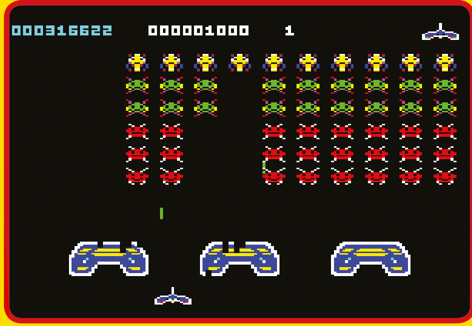
software



» [C64] *Boing* was created by Stan Clear in 1986 but it was his first and only game.

Mark can't quite remember if he ended up selling the boy's game, but it could so easily have been one by Richard Clark, a 16-year-old teen who had walked in off the street with a *Pac-Man* clone he had coded on the Commodore VIC-20. Mark is quoted back in 1984 as saying he rejected this game but that he had bought the schoolkid a Commodore 64, asking him to produce something else in his spare time. As we'll hear later, Richard became an important programmer for Mark's new venture. In the meantime, though, a man called Sandy Marchant would play a more crucial role.

Sandy had been a programmer and analyst for the Ministry of Defence. "I'd met Sandy a few years after I set up The Computer Room," recalls Mark. It was around the time Mark had started to think about creating his own serious software applications. "I saw a gap for a newsagent system which would allow them to get up in the morning, print a list and receipts – the kind of stuff that would make their lives easier," he continues. "I designed something called Supernews which I was going to flog it to all of the newsagents in the land and I employed Sandy as a freelancer to develop it."



» [Amstrad CPC] *Classic Invaders* was created by Paul Midcalf and it succeeded in bringing a game of *Space Invaders* to the Amstrad.

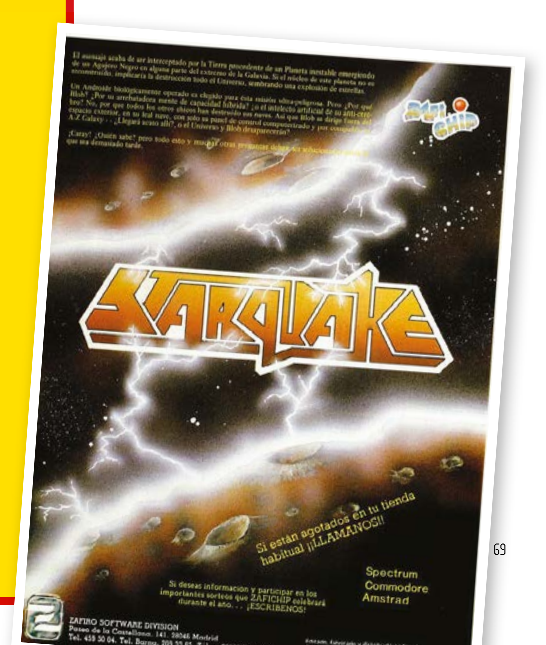
The resulting software became a 'Commodore Approved Product' and it was followed by a handful of utilities for the VIC-20 including a word processor and a label printer. Yet Mark was sure games would sell in far greater quantities. "I remember chatting to Sandy and telling him that I was going to try and go somewhere with it," he says.

It wasn't long before Sandy became a codirector and the company took office space in a quaint, converted granary in Tunbridge, Kent, before brainstorming a name. "We couldn't think of anything, as is usual with this type of thing," Mark laughs. "We were sitting in the office and someone threw up the word, 'Bubble'. I can't remember who it was but then Sue, a lovely girl who was working as our secretary, said, "Bus" and we thought, 'Well that's bloody ridiculous.' But then we felt, well, why not?" Bubble Bus Software was born.

The company then geared itself up for its first release. "Sandy knew a couple of coders," says Mark. "One of them was a UK bridge champion who was a particularly bright guy and another was Nick Strange." Strange spent four months coding the pool-based *Hustler* for the Commodore 64 which gave players six different game options and allowed for two ▶

instant expert

- Bubble Bus founder Mark Meakings ran a company selling Commodore and Apple machines called The Computer Room.
- **Mark originally wanted to produce serious applications and he oversaw the creation of four utilities for the Commodore VIC-20.**
- When he visited Commodore in Slough, Mark said he got a glimpse of what the Commodore 64 was capable of in terms of games.
- **Bubble Bus' logo was designed in the bath one Sunday morning by a graphic designer local to the company.**
- Many of Bubble Bus' early games were created for the Commodore 64.
- **Nick Strange wrote the company's first title, *Hustler* – he had never written a game before.**
- Indeed, the company tended to gamble on unknown talent and saw the potential in good ideas and design.
- **Many of the earlier coders were friends of codirector Sandy Marchant or, at the very least, friends of friends of Sandy.**
- Although Mark used to program when he was younger and worked on mainframes in the City, he found coding dull.
- **Mark wanted Bubble Bus to control the development and publishing of its games in its home of the UK.**
- The company was not afraid of making clones of other games, riffing on *Donkey Kong*, *Pac-Man*, Ultimate games and more during its time.
- **Bubble Bus appeared regularly at shows with a stand looking like a mock-up bus.**
- *Starquake* was the company's biggest hit, reaching number 27 in the Your Sinclair top 100 best games of all time list.
- **The last time Mark and Sandy saw each other was when Mark left, having sold his share of the company.**





timeline


■ Bubble Bus Software is founded by Mark Meakings.


■ Sandy Marchant becomes the publisher's codirector shortly afterwards.


■ *Hustler*, written by programmer Nick Strange, is released.


■ A handful of games, including *Kick Off*, are released with Bubble Bus preferring not to blitz the market.


■ Investment in young talent pays off with games such as *Bumping Buggies* and *Tazz*.


■ Mark Meakings decides to sell his share of the company and leaves.


■ *Wizard's Lair* is taken on by Bubble Bus after being touted around by Stephen Crow.


■ Stephen's relationship with Bubble Bus blossoms with the release of *Starquake*.


■ Crow is named Best Programmer Of The Year by readers of *Crash* magazine.


■ Bubble Bus continues to make appearances at shows including this year's lacklustre Consumer Electronics Show at London's Olympia.


■ Tom Prosser's *The Ice Temple* is released on the Spectrum and is ported to the C64.


■ *Classic Muncher*, a *Pac-Man* clone, is released.


■ A new budget label, Mini Bus, is created for Bubble Bus' rereleased games.


■ Other games released this year include *The Fifth Quadrant* and *Max Torque*.


■ Bubble Bus starts to park up yet *Starquake* is created for DOS and *Classic Axiens* is released.


■ Its last game, *Final Frontier*, is published by Personal Software Services.



» Bubble Bus exhibiting its games at a very early European show in 1982.

gamers to compete. Ported to various machines, it sold 30,000 copies. Other earlier games included *Cavern Run 64*, *Alien Panic 64* and *Krazy Kong*.

While Sandy figured which games were worthy of release and which ideas would work, Mark looked after the business side of the company. "I used to go out and flog to chains like WHSmith," he says. "The shops were eager for new stock and there was an insatiable appetite for fresh and exciting games. Providing you were able to give them quality stock and the packaging was right, it wasn't too hard a sell. The company took off very well and we put a lot of effort into it."

Nick Strange followed up *Hustler* by programming *Kick Off*. Unlike the more famous soccer title of the same name that was released six years later, this one was based upon foosball and it drew upon his own obsession with the tabletop game. It wasn't a great release, for sure, (although *Personal Computer Games* magazine called it 'compelling' and awarded it six out of ten) but, again, it sold decent numbers.

To fulfil the orders, Mark remembers sitting at home all night copying cassettes. "We had bought these duplicating machines which would copy one tape on to 11 and it allowed us to manufacture our own games from our living rooms," he says. "In fact, we had multiple ones so we'd sit there with a cup of coffee reloading them and trying to meet the orders that were coming in." As well as selling the games in the shops, Bubble Bus placed hand-drawn adverts in magazines allowing people to buy direct, each one selling for £6.99.

Bubble Bus began to hire fast. "Somehow, the team grew," Mark remembers. "We soon had six to eight coders." One of the new programmers, Falklands veteran Terry Owen, worked on the colourful single-screen shooter *Flying Feathers* for the Commodore 64 which allowed players to control a crosshair and blast at as many birds as possible. He had no previous coding experience and the game was reminiscent of Nintendo's *Duck Hunt*, albeit without a physical zapper. It went down reasonably well with gamers but it also caught the attention of the Royal Society For The Protection of Birds. "The RSPB tried to get it banned because players were shooting up crows which was quite interesting at the time but it was just one of those things," Sandy recalls.

The games kept coming. Richard, the teenager mentioned earlier, ended up writing *Bumping Buggies* for the Commodore 64 and it was released in 1984. As a clone of Data East Corporation's top-down racing game *Bump 'N' Jump*, it allowed players to compete against rivals while attempting to knock them off the road or leap over them. Richard eventually became a Bubble Bus employee after he finished school, coding games such as the timed platformer *Cave Fighter* in which gamers could indicate how high they wanted

> **"There was an insatiable appetite for fresh and exciting games"**
> Mark Meakings



» [Amstrad CPC] Bubble Bus dipped its toes in a number of different genres, always happy to try new things.

defining games



WIZARD'S LAIR
VARIOUS 1985

■ Inspired by the graphics of *Sabre Wulf* and the gameplay of *Atic Atac*, Stephen Crow's game put the publisher firmly on the map. Spread over 256 locations and created for the Spectrum, the top-down adventure starred Pothole Pete on a mission to collect the four pieces of the Golden Lion after becoming trapped in an underground cave. Players had to battle against various, uniquely-behaving monsters while picking up food, keys and spells, and it proved to be a hugely entertaining jaunt which led to it being showered with praise. Its success inevitably led to ports, with the CPC and C64 versions actually being placed on the same cassette.



STARQUAKE
VARIOUS, 1985

■ It comes as no surprise to learn *Starquake* was being hailed a classic within days of its release in 1985. For while there were undoubted similarities with games made by Ultimate, Stephen Crow created a standout platform adventure that dazzled the eyes with fine graphics and animation while providing addictive gameplay. Gamers assumed the role of a character called Blob and fought enemies as varied as giant fleas and tiny birds. But it was the complexities of the game which stood out the most, whether it was the use of teleports, hover platforms or pyramids which allowed items to be swapped.



» [C64] *Flying Feathers* got Bubble Bus into trouble with the RSPB for allowing gamers to shoot at birds.

the character to jump. He also worked on *Aqua Racer*, *Awesome Earl in SkateRock* and *Trizons*.

Yet Richard was not unique in this sense. Bubble Bus, as with many software houses at the time, took on lots of young talent. "I remember driving over to a school one lunchtime to meet one of the schoolboy coders with £2,000 to £3,000 in my pocket," Mark recalls. "He was in the playground with his mates and I gave him the cash. You can imagine how that went down. He was a hero but that's how it was and they were exciting times."

Before long, Mark and Sandy looked to America to expand their market and find new games. They took a *Centipede* clone called *The Exterminator* which had been programmed by Ken Grant for the UK market ("I'm not familiar with Bubble Bus," Ken tells us, "but games back then were bought and sold by various companies which came and went") as well as *Widow's Revenge* by Doug Underwood.

"I also went to the States and met with various companies," says Mark. "I licensed *Hustler* [to HESware which renamed it *Minnesota Fats' Pool Challenge*] which I thought was a pretty good game and they did well with that. In fact I went to the CES one year and saw it on their stand. In that same year, I remember Leonard Nimoy [Spock in *Star Trek*] being there which was quite exciting for us."

Mark also recalls some downtime Stateside. "I took Sandy out with me," he says. "At that time not



hustle and bustle

When Bubble Bus allowed *Hustler* to be released in America following a deal with HESware, it was renamed *Minnesota Fats' Pool Challenge*. Yet in June 1984 *Popular Computing Weekly* reported that Thorn EMI had started to import American software into the UK and it had gained the marketing rights to HESware's games.

This brought about an unusual situation in which *Minnesota Fats' Pool Challenge* ended up being sold in the UK where *Hustler* was still being available to consumers via Bubble Bus. It meant that the same game was on the shelves, albeit under different names. Worse –as *Commodore User* magazine stated – the US version of the game was retailing at £9.95 which was some £3 more expensive than *Hustler*.

Even so, Thorn EMI's Lee Richards didn't think the situation was much of a problem, telling *Popular Computing Weekly*: "It was included in the deal because we thought it was a particularly good game."


POPULAR Computing WEEKLY

40p

BRITAIN'S BEST-SELLING MICRO WEEKLY

News Desk

Thorn EMI imports from States

From your TV to your micro

VALHALLA

GLUG GLUG

TITANIC

STAR GAME

This Week



AWESOME EARL IN SKATEROCK

DOS, 1986

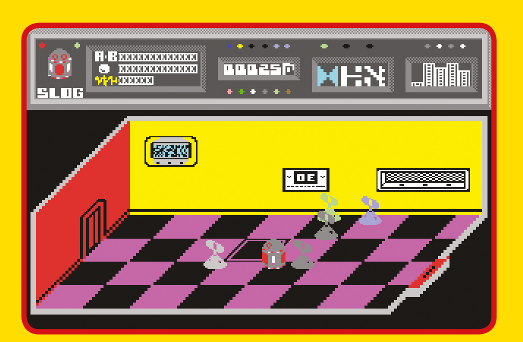
■ Called simply *SkateRock* in the UK (and, inexplicably, *Skate Rock Simulator* when it was rereleased), *Awesome Earl* tapped into the Eighties trend of skateboarding and used it to create a game which riffed to a small degree on *Paperboy*. It entailed navigating Earl along a series of side-scrolling streets, avoiding or jumping over obstacles in order to collect eight flags as the clock ticked. But although it was notoriously difficult and perhaps best played with the sound down (the music really grated after a while), its varied graphics and fierce challenge made it rather addictive. A Spectrum version was on the cards but it was never released.



THE ICE TEMPLE

ZX SPECTRUM, 1986

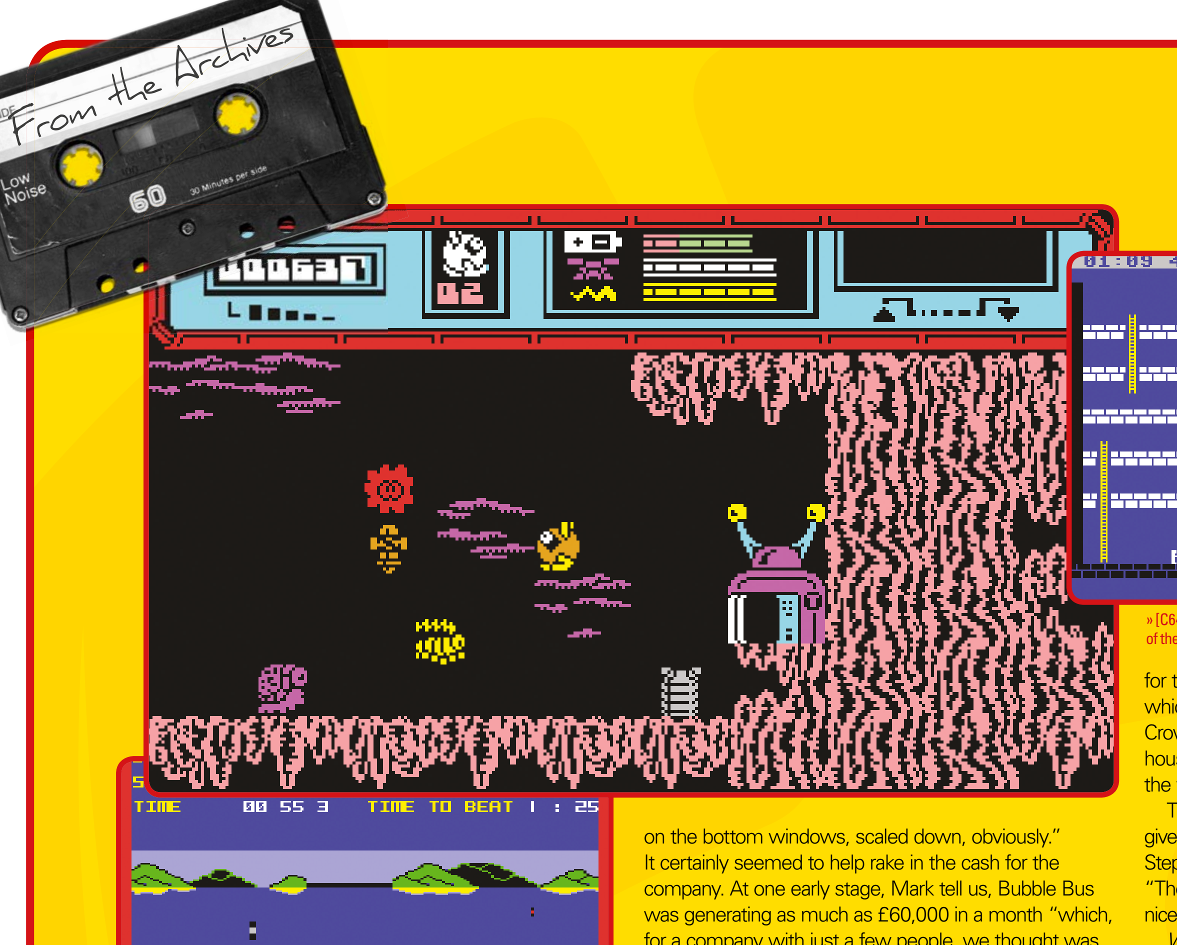
■ Once again, Bubble Bus took inspiration from another title but in the case of *The Ice Temple* it made the game instantly familiar to anyone who enjoyed the likes of *Lunar Jetman*. Originally created on the Spectrum by Tom Prosser, it involved trashing eight pieces of an alien-controlled thermionic reactor scattered around an asteroid, yet given the game was spread over a staggering 900 rooms, this was easier said than done. It entailed lots of firing and teleporting which taxed both brawn and reflexes, and it ramped up the difficulty with just four lives. It may not have been up to the standard of Crow's games, but there was no doubting its lastability.



THE FIFTH QUADRANT

ZX SPECTRUM, 1987

■ Appearing in 1987, *The Fifth Quadrant* was one of Bubble Bus' later releases but at this stage – aside from a range of classic games that sought to cash in on well-known names – it appeared the publisher was aware of what its customers wanted: titles with a sense of adventure spread over many, many screens. This one was primarily a 3D maze shoot-em-up with 230 rooms to explore with scores of enemies to blast away but it seemed the magic of *Starquake* was a world away. *The Fifth Quadrant* was arguably too complex for its own good and it lacked any visual sparkle. It was also rather repetitive.



» [C64] *Alien Panic 64* had players trying to send three aliens to the bottom of the screen by climbing ladders and digging holes

» [C64] Players could negotiate 20 water-based courses in *Aqua Racer* as they powered to the finish line against the clock

▶ everyone had been travelling as widely as they do nowadays and he'd never been abroad so we went to Disneyland and did all the rides together like a couple of idiot businessmen and just had a laugh."

Bubble Bus exhibited at numerous shows closer to home too including those held at the Barbican and Olympia in London. "We built a wooden bus for them," Mark says. "If you imagine a London bus, then we had the screens along the top windows and the controllers on the bottom windows, scaled down, obviously."

It certainly seemed to help rake in the cash for the company. At one early stage, Mark tell us, Bubble Bus was generating as much as £60,000 in a month "which, for a company with just a few people, we thought was really quite good".

Even so, it didn't run smoothly. Mark and Sandy felt they were not getting along and a business decision had to be made. "I sold my share of the business to Sandy and I think Nick Strange may have taken a share, possibly other programmers. I went off to do other things."

It was the tail end of 1984 and Mark, now aged 34, decided to try and set up a new company called Lionheart. He had hoped to use freelancers to release games for the Amstrad CPC 464, C64 and C16 by January 1985. "I didn't start the new games business in the end," he says, leaving the industry entirely.

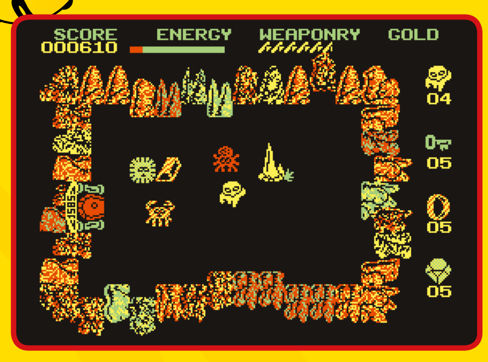
From that point on, Sandy took greater control of Bubble Bus and 1985 became a particularly good year for the company. It saw the release of *Wizard's Lair* which had been written by a teenager called Stephen Crow. He's actually produced it for his own software house, Poppysoft, but when that had folded he touted the title around in the hope of finding a publisher.

Thorn EMI offered £1,000 for the total rights which, given it took a year to write, seemed rather unfair. Stephen declined the offer and approached Bubble Bus. "They were just trying to make it as a publisher and were nice," Stephen says, "so I decided to go with them."

Wizard's Lair had shades of *Atic Atac* and it went down a storm on the ZX Spectrum, with *C&VG* magazine awarding it 98% and *Crash* dishing out 94 per cent. It certainly made Speccy owners sit up and take notice of Bubble Bus (more so given there was a prize for the best validated score in the game) and so expectations were very much high for Crow's subsequent puzzle platformer *Starquake* which he programmed at the young age of 19.

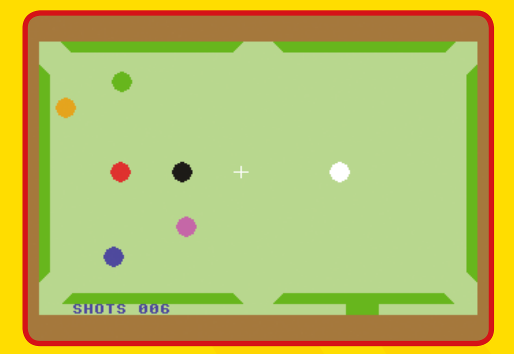
It's proved to be a success, being fawned over by critics and praised for its Ultimate-style gameplay, stacks of screens and innovative features. It earned Stephen respect in the industry, not least among his fellow coders. "What a geezer," says coder Paul Midcalf. "Simon [Jones, a graphics artist] and I were starstruck by him when we worked at Bubble Bus but I'm not sure if either of us said anything to him other than 'hello'".

dna of bubble bus software



A FRIENDLY TEAM

■ Bubble Bus never did grow to the size of some of the more prolific publishers in the Eighties but that, in some ways, worked very much to the company's advantage. When Stephen Crow, for instance, was trying to find a home for *Wizard's Lair*, he ended up choosing Bubble Bus because he felt those running it were 'humble' and 'really nice'.



WIDE VARIETY

■ The popularity of *Wizard's Lair* and *Starquake* led Bubble Bus to release similar kinds of games in its later years but its overall output was actually rather varied. Granted, the quality wasn't always high, yet it published shooters, sports sims and platformers, for example, as well as action-adventures which ensured most tastes were catered for at some point.



8-BIT COMPUTERS

■ The vast majority of Bubble Bus games were, by the very nature of it operating in the UK during the Eighties, released for 8-bit computers (it dabbled briefly with the Amiga and DOS, though). Commodore machines – notably the C64 and VIC-20 – were particularly well catered for but many were also created for the Spectrum, MSX machines and Amstrad CPC.

> **"It was a small, close knit family of people and there was a lot of fun"**
> Mark Meakings

Paul joined Bubble Bus with Nick Jones in 1986. They'd written a game called *Tombstown* with the aid of a £1,200 loan from Lloyds Bank and it had been signed to Amsoft. The pair had coded a sequel called Deathsville which Nick and Sandy pulled apart, giving friendly, useful advice before hiring them with the offer of contracts worth £5,200 a year and releasing the game. Paul was also asked to create the first game in a new series of 'classic' titles. The first was called *Classic Invaders*. "I jumped at the chance to produce something that had faster gameplay than the original. It was definitely my finest coding hour."

Yet it wasn't all work. Paul, who also wrote the shooter *Tazz*, recounts how he and Nick Strange persuaded the office junior to exchange what they said were a new pair of plimsolls for a different size – only for the worker to be confronted by stinky, torn footwear ("he never forgave us," says Paul).

Bubble Bus also continued to attract talented people. In 1987 Nick Jones who had worked on Herbert's *Dummy Run* for Mikro-Gen, created the *Pac-Man* clone *Classic Muncher*. The publisher launched a budget label called Mini Bus for the Amstrad, C64 and Spectrum. Yet it appeared to be in some sort of trouble.

Bubble Bus was one of a set of companies which began operating under a label called Mandarin Software, set up in Macclesfield by Level 9 Computing and it came at a time when games production seriously nosedived at the firm. The DOS version of *Starquake* was published by ShareData in 1988 but the releases were drying up. In 1989, Bubble Bus' last game – called *Final Frontier* – was released by Personal Software Services for DOS. With lots of other independent companies being snapped up by larger concerns at the time, it appeared the market had become more difficult to navigate as a small software house.

"It carried on for a few years after I left and then it folded," says Mark. Yet his memories remain. "It was a small, close knit family of people and there was a lot of fun and a lot of hard work," he says. "I can always remember at the end of that particular era thinking there would be a lot of consolidation with smaller software houses gobbled out and most of those companies didn't survive that long. But it was an exciting time. It was lightbulbs going off everywhere but it was a time of possibilities and we made the most of them." *



» [Amstrad CPC] The concept of *Hi-Rise* is excellent, but tricky controls means this action game can be a little tricky to play.



» [Amstrad CPC] Like many publishers, Bubble Bus would look to the arcades for inspiration. Can you get what *Classic Axiens* is based on?

PLAYER ONE 770 =2

YOUNG TALENT

■ Most of the developers who worked with Bubble Bus were at school or in their late teens and early twenties. That's not unusual – lots of software houses took on young people – but Bubble Bus didn't ask for evidence of past work. It sought those who showed promise and who could be trained. Some were working on their first ever games.



EQUAL MARKETING

■ Bubble Bus put an equal amount of effort into the promotion of each of its games, regardless of quality. It meant *Starquake* was given the same push as lesser games (much to the frustration of Stephen Crow) but it helped promote titles that may have otherwise fallen by the wayside. Bubble Bus was also ever-present at numerous computer shows.

where are they now?



MARK MEAKINGS

■ After Bubble Bus, Mark Meakings attempted to set up a new videogame company but decided instead to leave the industry. He founded the Future Group – a network of 65 nationwide computer training centres. He also headed Kaz which created and sold software aimed at teaching people to touch type in just 90 minutes. As well as writing many computer books aimed at beginners and a weight-loss guide for men called *See Willy: How The Power of Habit Can Make You Thin*, he founded Gotham New Media and plays drums in a band.



PAUL MIDCALF

■ Paul currently runs a studio called Audio Sorcery which records audio books and cast dramas for companies such as Big Finish Productions. He also runs Gift Daze which allows people recording time, builds websites, and he shoots and edits videos. "Basically anything geeky with buttons to make ends meet," he says.

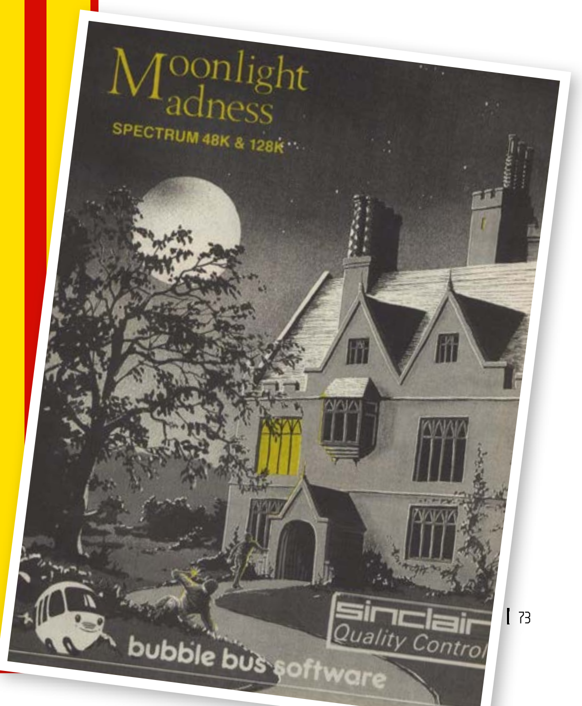


STEPHEN CROW

■ Having made a name for himself with *Starquake* and *Wizard's Lair*, Stephen went on to have a long career in games. He worked as an artist for Virgin Interactive Entertainment, became a level artist for Shiny Entertainment and a senior artist for The Neverhood. He was also the CFO and 3D artist for Monkeytropolis and he has plied his trade as a senior artist for Blizzard since 2004.

NICK JONES

■ Nick has been in the industry for more than 30 years, working on games such as *Stormlord*, *Deliverance*, *Earthworm Jim* and a host of *NBA* titles, having proven to be a very talented programmer and software engineer.



Future Classic

Modern games you'll still be playing in years to come



Info

» **Featured System:** Xbox 360
» **Year:** 2006
» **Developer:** Rare
» **Key People:** Gregg Mayles (lead project designer) Justin Cook (producer) Grant Kirkhope (music) Gavin Price (design)

Go Deeper

» A giant Horstachio was created to promote the release of *Viva Piñata* in 2007 at Six Flags Mexico. It was 15 meters tall and 16 meters long.

» *Viva Piñata* was followed by *Party Animals* in 2007 and *Trouble In Paradise* and Pocket Paradise in 2008.

59.

»[Xbox 360] It's extremely relaxing watching Piñatas going about their everyday business.

Our resident Piñata lover Darran Jones – seriously, he keeps one on his desk – explains why Rare's adorably-cute garden simulator is as enjoyable to play today as it was back when it wowed us in 2006

VIVA PIÑATA

THE BACKGROUND

Inspiration can come from the most unlikely of places. When Rare's Tim Stamper approached the team that would eventually create *Viva Piñata* with his six-page game deisgn document, he also revealed that the idea came from a chance encounter with a strange insect.

"The story I always remember is that he talked about a hummingbird hawk-moth that he found in his garden," producer Justin Cook revealed when he was interviewed for *Rare Replay*. "It was lovely and sunny and this really strange creature was hovering above one of the flowers. He identified it and then looked at what sort of things he would need to make more of them appear in his garden and that was the idea for the game"

Justin also revealed in an interview with MundoRare that he was part of a small three-man team (that included Gregg Mayles) working on the original prototype that would eventually become *Viva Piñata*. Originally planned for Microsoft's Pocket PC, development moved across to the original Xbox, before moving to the Xbox 360, when the team realised that the console wasn't powerful enough for its needs. Justin also revealed on *Rare Replay* that an interest in Mexican culture and a need to unify the animals saw the team settle on the distinctive Piñata style that dominates every aspect of the game and still makes it stand apart to this day.

THE GAME

There's a horribly inaccurate generalisation about Rare on various gaming forums that suggests the company lost its magic after the Microsoft buyout. It's hard to see merit in such logic, when the likes of *Viva Piñata*, *Banjo-Kazooie: Nuts & Bolts* and *Kameo: Elements Of Power* all exist. Play *Viva Piñata* today and the first thing that strikes you is just how well crafted it still is. It's immediately accessible, and within minutes you're



» [Xbox 360] The maze minigame appears every time you pair two Piñatas. Luckily, it can be skipped if you don't want to keep playing it.


» [Xbox 360] There are a number of Sour Piñatas, which will cause misery by feeding on your resident Piñatas. Whack them with a shovel!


» [Xbox 360] In addition to telling the time, the clock also shows how much experience you need to earn in order to level up your garden.

Things of note

CATCH 'EM ALL



There are a total of 60 different Piñata to collect in Rare's game, ranging from the duck-like Quackberry to the elephant-sized Elephanilla – gotta collect 'em all!

MARVELLOUS MENUS



The menu system really is excellent, allowing you to perform all sorts of complex tasks with the minimum amount of effort.

CARTOON CAPERS



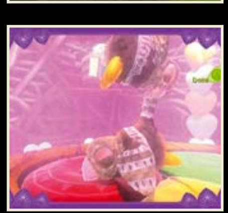
Microsoft wanted *Viva Piñata* to be a big success, going so far as to commission an animated 52-episode show, which ran for two seasons.

STRANGE HELP



The odd-looking residents of Piñata Island help you out in a variety of ways, from looking after any sick animals to acting as a labour force, constructing Piñata buildings.

ROMANCE DANCE



There are 60 different animals, each with their own distinctive courtship dance and accompanying piece of music. Grant Kirkhope created each composition.

"Play it today and the first thing that strikes you is just how well crafted it still is"


» [DS] *Viva Piñata: Pocket Paradise* is an astonishing port that squeezes the entire 360 game onto Nintendo's DS.

clearing out your garden, attracting Piñatas and buying and selling at one of many local stores that specialise in everything from catching Piñatas to building homes for them. Its accessibility is partly down to an excellent radial menu system that allows you to effortlessly switch between different tasks, but it's also because it never overwhelms you, always purposely introducing new things, whether it's a shovel upgrade that allows you to start building ponds, or deeds that will enable you to expand the size of your garden.

Wild Piñatas are black and white in colour and patrol the borders of your garden, only visiting when specific requirements are met. Additional requirements cause the Piñata to become resident and change colour, and that's when you realise just how clever and complex Rare's game actually is… The garden of *Viva Piñata* is a delicate ecosystem and everything the player does will impact on what's found and decides to stay there. If you want the rabbit-like Bunnycombs to thrive in your garden then you'll need to entice them with carrots, which first need to be purchased, grown and watered. Feed them two carrots and have at least four per cent of your garden covered in grass and the Bunnycombs will happily frolic around your garden, allowing you to focus on tempting a new creature to stay. Having Bunnycombs or Cluckles (chickens) in your garden will attract Pretztails (foxes) but they'll only become a resident if they've eaten a Bunnycomb or Cluckle. It's a delicate balancing act, but it's never one that overwhelms the player and it's genuinely delightful to see your garden grow and expand and watch its residents live, fight and inevitably die (in a shower of delicious candy we might add).

While new Piñatas will always become a resident if you have the correct requirements for them, the easiest way to create more is to simply breed them, which results in one of the most delightful aspects of Rare's game. Once your Piñata's romance requirements have been fulfilled, you'll be transported to a neat maze-based minigame that gets more complex depending on the type of Piñata being romanced. Upon navigating the maze and reaching your mate, you are treated to an endearingly lovable romance dance; each one set to a specific piece of genre music by the talented Grant Kirkhope.

WHY IT'S A FUTURE CLASSIC

Viva Piñata has everything we want in a classic game. It's accessible, without being overwhelming, has an incredibly distinctive art style that still hasn't lost any of its impact and is filled to the brim with clever gameplay mechanics and neat ideas that constantly give you a reason to return to it. It's also a Rare game through and through, displaying all the high production values, technical prowess and unmistakable charm that the company has been displaying in its games since the early days of the ZX Spectrum.

While Rare created a sequel for *Viva Piñata*, which was released in 2008, and added several new features, including the ability to trap and capture Piñatas in new desert and arctic environments, we actually prefer the original game, as it feels purer and less complicated than its predecessor. In short, it's an absolute delight that proves that Rare is still a studio with plenty of magic left in it. *

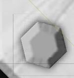
Iron Soldier

Stomping onto the Jaguar, Iron Soldier set a new benchmark in destructible environments. After sequels across different platforms, it disappeared. Tom Charnock investigates Eclipse's forgotten mech series...

A 40-foot tall, humanoid robot bristling with enough cutting-edge technology and explosive ordnance to level an entire city – if God made man in his own image, then man surely went one further when he created the mech. Yes, mechs are one of the most popular and recurring elements of the fictitious battlegrounds of our favourite works of literature, movies, comics… and games. The history of the giant robot has its roots in science fiction going back as far as the late 18th Century, with novels like HG Wells' *War Of The Worlds* and Jules Verne's *The Steam House* both featuring gigantic, mechanical monoliths, but in more recent times the use of bipedal war machines is usually attributed to the *BattleTech* board games of the Eighties. The one thing to differentiate a mech from a robot, though, is the reliance on a pilot; a robot is conceived as an automaton with its own AI, where a mech is and always will be a tool without an innate sense of awareness. Remove the human at the controls, and the mech returns to being a useless pile of metal and gears.

The history of mechs in media is a long and storied one, and there is a clear stylistic divide between how these fantastical machines are portrayed in Eastern and Western media. In Japan, the mech is a quick and agile extension of the human form; this is in stark contrast to the western ideal of a mech: units which tend to be large, slow and lumbering machines. Forged for the sole purpose of putting explosive rounds into enemy units or structures – the western realisation of the mech is as a no-frills piece of military hardware. It is designed to strike fear into the heart of the enemy, but, at heart, it's a battle unit without a personality or characteristics. While the distinction between the two different strands is hardly black and white, franchises like *MechWarrior* and *Hawken* are less interested in the implied personalities of the mech units themselves and place more emphasis on the pilots; while Japanese franchises like *Armored Core* swing in the opposite direction – the mechs are the stars and the pilots take a back seat. Coming from German developer Eclipse Software, *Iron Soldier* reinforces this consensus with ease.

» [Atari Jaguar] Tanks are a pain, but can either be shot or stamped on.





» [Atari Jaguar] Buildings being reduced to rubble is a common sight in *Iron Soldier.*

Released in 1994 for the Atari Jaguar, *Iron Soldier* represented something of a departure from the norm for console-based mech games. Featuring large, lumbering mechs engaging other large, lumbering mechs in city-based stages where literally everything could be destroyed, *Iron Soldier* brought a totally new type of experience to the table. Completely free-roaming environments, fully-3D polygonal cityscapes, the ability to level entire blocks with well-placed missiles – these were all things that had not been seen previously in console-only mech games. "We only had one thing we knew we had to include – the ability to destroy absolutely everything," says Marc Rosocha, the lead developer and designer of the *Iron Soldier* franchise. "A lot of things were cut, but the ability to blow up anything you could see had to be in there." Marc and his team at Eclipse Software fulfilled this brief, however *Iron Soldier* started life as a vastly different game. The fact that it surfaced as the technically-impressive 3D mech game, and one which spawned two sequels across four different platforms, is an impressive legacy. However, to appreciate the history and scope of *Iron Soldier* you need to go back to the German homebrew scene of the late Eighties.

As a teenager, Marc was heavily involved in the hacking and demo scene with systems like the Commodore 64, but it wasn't until the release of the Atari ST that he became fully immersed in the world of homebrew software development. Atari's 16-bit, Motorola 68000-based system was something of a quantum leap over its contemporaries and turned Atari's main players into the stars of their day. "Jack Tramiel and his team at Atari had the same status to me back then as Steve Jobs does today," explains Marc. "The Atari guys were seen as heroes for bringing out such a fantastic computer." After acquiring an ST and getting to grips with the development tools, Marc went on to work with System 3 in the UK on his first commercial game – the Atari ST port of *Last Ninja*. "I was lucky to get in touch with studio head Mark Cale, as System 3 didn't have much knowledge of the Atari ST or the 68k CPU. That's really how I started my first professional game industry stuff" Marc continues. It wasn't long after this that Marc began working on his own games back in Germany. "In our area of Germany, Gütersloh, there was big media company called Bertelsmann and, via its subsidiary, Ariolasoft they were heavily involved in importing and distributing games from the US and the UK. This led to an ecosystem of studios in the area which was formed by ST demo scene stars and later acquired by Ariolasoft. I joined them after working with System 3, and my first Thalion titles were *Chambers Of Shaolin* and *Wings Of Death* for the Amiga and ST."



» [Atari Jaguar] Factories and fuel silos are easy targets, and usually contain bonuses.

ATTACK OF THE MECHS

Other franchises with mechs appeal

MECHWARRIOR
1989



■ Perhaps the most famous of all the mech franchises, PC stalwart *MechWarrior* spans a total of four different entries. Primarily played from a cockpit viewpoint, *MechWarrior* is more of a simulation than an arcade shooter, with complex story arcs and a huge expanded universe as part of the *BattleTech* mythos.

GUNGRIFFON
1996



■ Game Arts' *Gungriffon* series started life on the Sega Saturn, and gave the player command of a bipedal unit that had the ability to hover for brief periods. While it later jumped to the PlayStation 2 and Xbox with mixed results, the two Saturn titles are highly regarded.

ARMORED CORE
1997



■ The *Armored Core* series spans several console generations and places an emphasis on upgrading and customising mechs. Played from a third-person, over-the-shoulder viewpoint, the *Armored Core* games feel more like traditional arcade shooters, with quick nimble units in place of slow, lumbering leviathans that dominate the genre.

FRONT MISSION
1995



■ Square's long-standing *Front Mission* series differs from the rest of the games listed here as it spans a number of different genres. The main games are turn-based, tactical role-playing games with deep storylines, but several entires in the series are traditional third-person shooters.

VIRTUAL ON
1995



■ Sega's *Virtual On* has its roots in the arcade, with players taking part in one-on-one battles with opposing mechs in an arena. The mechs featured in *Virtual On* have the ability to hover and engage in both hand-to-hand and projectile-based combat.

MARVELLOUS MISSIONS

Destruction has never been this much fun…



PEARL HARBOUR

IRON SOLDIER

■ Iron Fist cargo vessels are currently docked at a lightly-guarded shipyard and disrupting this ocean-going convoy will put a dent in the corporation's ability to wreak havoc. Get in there and sink the cargo by any means necessary.

PANDORA'S BOX

IRON SOLDIER

■ Intelligence reports suggest Iron Fist is building a secret weapon at a fortified research facility on the outskirts of the city. Your mission is to take out the defences, bust down the door and find out what they're doing.





A WALK IN THE PARK

IRON SOLDIER

■ The Resistance's HQ is under attack from a battalion of Iron Fist tanks rolling up onto the freshly-cut lawns. Take them out before they can destroy the HQ building, but make sure you don't trample on the ornate flowerbeds.

ACID RAIN

IRON SOLDIER 2

■ Tanks and rocket launchers are falling from the sky, dropped by transport planes and parachuting in with one objective – taking you out. Engage them before they reach the ground, or suffer the consequences.





CORPORATE WAR

IRON SOLDIER 2

■ Those pesky Iron Fist lot have built yet another military facility, but it's far too close to the nearest city. Saddle up, and move out. Your mission is simple: engage the enemy, storm the base and leave no building standing.

ARCHIPELAGO

IRON SOLDIER 2

■ Iron Fist has set up a cluster of bases on an archipelago of islands that are connected by teleport pads. Using your IS, you must destroy all factories and fuel depots; dodging patrol boats, helicopters and mechs patrolling the islands.





THE WALLS OF JERICHO

IRON SOLDIER 3

■ An early mission in *Iron Soldier 3*, this campaign tasks you with defending the skyscrapers of the titular city of Jericho against an onslaught of enemy forces. Furthermore, there are walker mechs running amok between the towers.

POWERSPARKS

IRON SOLDIER 3

■ An network of defence systems has gone haywire and the only way to pull the plug is to do so at the very source. In Powersparks, you are tasked with destroying a number of power stations, eliminating the threat.

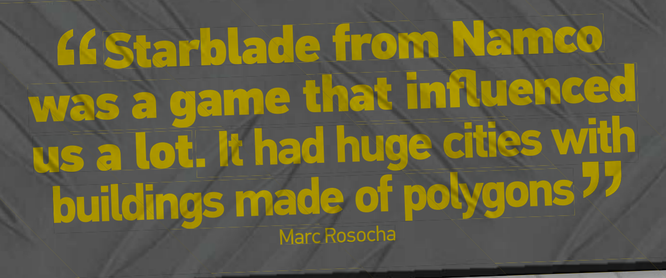




FINAL COUNTDOWN

IRON SOLDIER 3

■ A late-game mission, Final Countdown see you land in the midst of an Iron Fist stronghold. Your only real objective here is to completely destroy everything you can see, and eliminate the enemy jets circling ominously overhead.



That was in 1990, and Marc and his team at Thalion went on to produce more ST games that really pushed the hardware. "Most of us as Thalion who were working on the ST were ex-demo-scene guys so we really knew the hardware," says Marc, "but after a few years I left Thalion and formed my own company." That company would be called Eclipse Software and was set up by Marc so he could focus on the arcade-style games that Thalion was moving away from. It was at this point in 1991 that Eclipse Software's sequel to *Wings Of Death*, *Lethal Xcess*, was released to widespread acclaim. With an impressive back catalogue of games for the ST platform, it was only natural that Marc began to investigate how he could form a relationship with Atari. However, being based in Germany where Atari was trying to establish its platform as a business machine, Marc found it frustrating to get the attention of the Tramiels. "We were showing the world what the Atari ST could do as a games machine, but in Germany Atari was trying the establish the system as a business machine. There, it was used as a business tool with a monochrome monitor," he explains. The turning point came when Atari announced the Falcon in 1992.

The Falcon was a more capable computer than the ST and it was evidenced by the games that were being









» Some concept art of *Iron Soldier's* mechs.



» [Atari Jaguar] Fuel depots are highly explosive, and often one missile is enough for a chain reaction.



» [Atari Jaguar] *Iron Soldier 2* features enemy mechs that are nicely detailed.

released for the platform not long after launch. Polygonal engines were now a more realistic proposition than they had been on the ST, and the Falcon was even doing things not possible on an Amiga. "It was a very sexy machine," says Marc of the Falcon. "You had a multi-processor system with much better capabilities than the ST or Amiga. Atari had overtaken what the Amiga could do with the Falcon and after multiple attempts at showing the Atari execs what we could do on the ST, I said to them, 'Imagine what we could do with the Falcon!' and two weeks later we had one of the very first Falcon machines in Germany.

The graphics Eclipse produced impressed the Atari executives so much that they were used on the promotional leaflets for the Falcon – suddenly Eclipse was a hot property. "Atari was talking about positioning the Falcon as a games machine at this time so we started to build our own graphics tools." Atari had different plans for Eclipse, though, and in late 1992 Marc and his team were shown the plans for Atari's return to consoles. "Atari said to us, 'We want to go back into videogames, we have a new console and we want you to make games for our machine.'" Not long after that, Eclipse took delivery of one of the very first Atari Jaguar prototypes, known as 'Felix'. "It was a huge machine and it had all the custom chips inside," explains Marc.

Because the team at Eclipse was so adept at working with previous Atari hardware, it got to grips with the new system with ease. "Atari developers on the Jaguar would use Atari's tools. It wasn't a perfect fit and it took them a while to get their heads around it. We were familiar before we even knew about the Jaguar because we'd been developing for the Falcon" explains Marc.

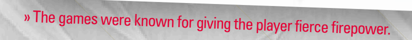
From this point, Eclipse and Atari's relationship blossomed. Eclipse had the development tools and Atari had a thirst for new games that would take advantage of the Jaguar's 64-bit architecture. As a longtime fan of fast-paced arcade games, Marc's first proposal for a title on the Jaguar was an on-rails shooter with 3D polygonal graphics. "*Starblade* from Namco was a game that influenced us a lot," says Marc. "It had huge cities with buildings made of polygons and overdraw – on an ST or a Falcon it would have been unthinkable to do because of the lack of memory bandwidth and drawing throughput, but on the Jaguar suddenly you had these kinds of capabilities. We were impressed with the Falcon but when we got the Jaguar, it knocked our socks off." Eclipse submitted a 3D shooter idea very much in the vein of *Starblade*, but the Sunnyvale executives rejected it because it was 'on rails'. "That really disappointed us, we could have created something like *Star Fox* on the Super Nintendo, but with so much more happening on the screen. It would have blown people's minds!" Atari was very bullish about having free-roam games like *Cybermorph* on the Jaguar, and after many heated discussions and arguments, Eclipse finally conceded.

By autumn 1993, Eclipse had spent almost a year developing Jaguar tools, making prototypes, testing and discussing new concepts with Atari but ultimately had nothing concrete as far as an actual game went. The breakthrough for Marc came when a meeting with Atari associate producer Sean Patten revealed a passion for mechs. "Sean's office was full of mechs, he had little models on his shelves and was a total expert on everything to do with them. He said to me 'I'm such a big mech fan… why don't you do a mech game?' and I agreed, as long as we could blow everything up." Sean agreed instantly to this request, and the wheels were set in motion. Marc wanted to do something visually impressive, and blowing the scenery up was a core mechanic of this newly proposed game. "I wanted to fill the screen with smoke and debris and rubbish!" he recalls. All the components were falling in to place for Eclipse's first Jaguar game – destruction, a mech, and an apocalyptic setting. Sean Patten was on board to produce and Atari was adamant that the game be open world. "Those were the three pillars that formed Iron soldier," explains Marc, "heavy property damage, a mech theme and a game that was open world and not on rails."

Production on *Iron Soldier* began at pace and the game was completed in under a year, such was the skill of the developers at Eclipse. Upon release, *Iron Soldier* garnered rave reviews with magazines praising the visuals and fun factor attributed to being able to wander around large cities laying waste to the environments. "*Iron Soldier*'s great graphics present a sharp, through-the-robot's-eyes perspective on its polygon world…the visuals are generally crisp and fast" wrote Manny LaMancha in March 1995's *GamePro*, awarding the game 4.5 out of 5. The premise of *Iron Soldier* is a fairly simple one. Set in a near-future dystopia controlled by ▶



» [Atari Jaguar] When destroyed, many smaller buildings will yield repair and weapon bonuses.



» The games were known for giving the player fierce firepower.



» [PlayStation] The dynamic weather effects in *Iron Soldier 3* are really quite impressive.

> **"Atari were scaling back as the Jaguar hadn't sold as well as they'd hoped but that I shouldn't worry..."**
> Marc Rosocha

▶ an industrialist military corporation known as Iron Fist, you play an unnamed member of guerrilla group The Resistance. After capturing an Iron Fist mech, codenamed Iron Soldier, you strap in and take the war to the aggressors. There are 16 missions in total and a number of objectives are presented – from destroying certain Iron Fist targets or defending Resistance bases, to escorting convoys or simply destroying everything on the map. Enemies come in the form of tanks, helicopters, mobile missile launchers and even enemy Iron Soldiers, with whom engaging in full on fistfights is a standout moment. One of the most interesting aspects of *Iron Solider* is the use of the Jaguar's infamous controller, with various keypad buttons assigned to different weapon mounting points on the *Iron Soldier*'s chassis. Shoulders, hips and hands can be equipped with different types of offensive technology and using the supplied overlay they can easily be selected at the push of a button. The critical and commercial success of *Iron Soldier* boosted the profile of Atari's console, making gamers and industry workers take note, showing what the system could do in the hands of a skilled team of developers.

"After *Iron Soldier* came out, Atari asked for a sequel for the Jaguar CD," explains Marc. "We moved very quickly, we got a CD prototype unit from Atari and we just carried on almost immediately on the sequel." At this point in the Jaguar's life cycle, Atari had released the Jaguar CD unit and were looking to developers like Eclipse to help put 'killer app' titles out for it. "We could probably have gotten *Iron Soldier 2* completed sooner if we hadn't been making the game for both the cartridge and CD formats," says Marc. "The only thing we were really using the CD unit for was the FMV and the music tracks. The game was developed on the Alpine board for the Jaguar base unit, and we didn't use the Falcon-based CD sim at all. The game had to fit into memory so we were developing the game as a cartridge-sized ROM and just using the CD for audio and video tracks."

Iron Soldier 2 featured similar gameplay to *Iron Soldier,* but added more missions, improved texture mapping and better visuals due to Eclipse using the colour register bank of the Jaguar as a fast texture buffer. Marc and his team essentially exploited parts of the Jaguar hardware to do things they weren't originally intended for to apply more detail to the cityscapes and enemy units. However, by the end of 1995 and with *Iron Soldier 2* nearing completion, things started to look decidedly shaky for the future of the Jaguar. "In the Summer of 1995 I was at Atari HQ in Sunnyvale and I spoke to the guys working on *Battlemorph* for the Jaguar CD. I asked what they were working on afterwards and they basically said they weren't doing anything else because it looked like Atari were getting out of the gaming business," explains Marc. "Alarm bells started ringing so I spoke to John Skruch who was head of software development at Atari. I said, 'Hey John, people are saying scary things, what's going on?' He replied that Atari were scaling back as the Jaguar hadn't sold as well as they'd hoped, but that I shouldn't worry as I was their most important developer. 'Don't worry.' Literally two weeks later I had a phone call from John and he said that he'd just come out of a meeting with the Atari executives, and all new development was to be put on hold. They wanted to get out." Around November 1995 Atari started laying off key production



» [PlayStation] The PlayStation's extra grunt allows for stages with multiple levels of terrain.

DESTRUCTION 101

We're gonna need a bigger gun...



SHOTGUN

■ Low on range but high on firepower, equip this beast in your unit's hands and prepare to open a world of hurt on tanks and choppers at close range.



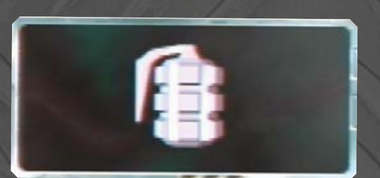
PARKER CHAIN CUTTER

■ The chain cutter is your fallback if your run out of ammo. It makes light work of buildings and trees, but isn't so hot when trying to swat attacking choppers!



CASSY ASSAULT RIFLE

■ Your standard-issue firearm, the Cassy fires in three-round bursts and is enough to deal with tanks and choppers. It's not so hot against other mech units, though.



BADGER HAND GRENADES

■ Oil-drum-sized grenades that can be chucked over great distances and provide startling pyrotechnics when they explode. Throw them at buildings and watch them turn to rubble instantly.

staff and by February 1996 it became clear that Atari wouldn't release further Jaguar games, including *Iron Soldier 2*.

The game was eventually finished and released in 1997 under the Telegames brand, but not before Marc had spoken with Sega about potentially porting *Iron Soldier 2* to the Saturn. "I had a meeting with Sega at their HQ in Silicon Valley, but they took me to one side and said that even though they'd like to work with me they knew, unofficially, that the Saturn wasn't going to be a success. I might end up in a similar situation as with Atari." After this, Marc spoke to Sony about working on the PlayStation and an ex-Atari employee Bill Rehbock, now at Sony, managed to fast-track dev kits for Eclipse. "We were very close to securing a deal with Sony where they would publish our next game, *Iron Soldier 3*," explains Marc. "We were very, very close to getting a first party deal with Sony. We were already celebrating that we were going with Sony as a publisher… but I cannot tell you what happened. The deal was brought down in the last second and so we signed a deal with Telegames and Vatical. Independently, we developed the NUON DVD version for VM Labs, a startup by former Atari executives."

"*Iron Soldier 3* got some good reviews from people who understood what we were doing. We wanted to preserve the DNA of what we had done on the Jaguar, that the mech is a huge machine that moves slowly and not super-fast. It is a big machine, that needs a while to move around and requires strategy" says Marc. "Some people criticised the game saying that it moved too slowly, but this is a huge machine – it has to have some weight! To counter these criticisms we added some new walker mechs with more speed. But we didn't want to break the DNA of the game. That was important to us."

With impressive visuals and some effects rarely seen on Sony's machine, such as zero pop-up and a complete lack of texture warping, *Iron Soldier 3* is still a great-looking game to this day. "I don't think any other engine comes close on the PlayStation. In terms of avoiding distortions, rendering large faces on buildings, the bullet holes in the scenery with no z-buffering and no flickering. Unfortunately I don't think any reviewers really recognised it at the time." While the game wasn't the success it deserved to be in terms of sales, *Iron Soldier* 3 garnered praise for Eclipse and represented one of only eight games for the Nuon system.

"We were approached by a Japanese publisher around the time *Iron Soldier 3* came out, and they wanted to localise the game. But they wanted to make it faster and enable the mechs to fly… I just said, 'No – over my dead body!'"

Ultimately, *Iron Soldier* is a series that was born of the western ideals of a mech game, and the three games that saw the light of day (*Iron Soldier 3+* was prototyped for the PlayStation 2 and Xbox in 2002 but was later cancelled) stayed very true to that mantra. Had the franchise been localised for the Japanese market we may very well have seen something not too common: a true hybridisation of Eastern and Western styles. As it is, the DNA of the Jaguar origins remain intact and *Iron Soldier* represents a fascinating chapter in the great tapestry of the mech genre. *

» *Iron Soldier*'s mechs were designed for levelling the playing area.



» [PlayStation] The night missions offer some impressive neon-lit cityscapes to ruin.



» [PlayStation] The explosions are even more impressive in *Iron Soldier 3*, with far better pyrotechnics.



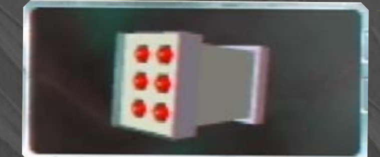
RATCHELLS GATLING GUN

■ A rotating, six-barrelled Gatling gun that fires at 600 rounds per minute. Hip- or shoulder-mounted, and makes mincemeat out of anything stupid enough to wander into its sights.



CHARLOTTE RAIL CANNON

■ The shoulder-mounted Rail Cannon has tremendous power, but slow reload speed. However, it does have unlimited range so is perfect for sniping distant foes.



WOLFPACK ROCKET LAUNCHER

■ Mounted on the hip or the shoulder of the Iron Soldier, the Wolfpack houses 12 'fire and forget' rockets. Immense power, but requires accuracy.



SABLE CRUISE MISSILE

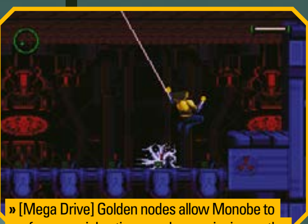
■ This cruise missile enables the player to fly around the map from a third-person perspective, zeroing in with precision on enemies, trees, ships, buildings… anything you like really!

Minority Report

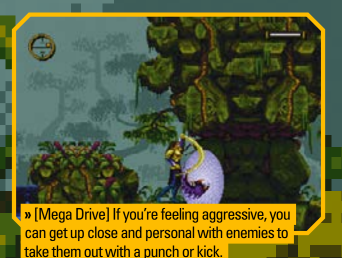
INTERESTING GAMES YOU'VE NEVER PLAYED

MEGA DRIVE

The Mega Drive is well known as the birthplace of some of gaming's most beloved franchises, but there's a lot more to Sega's popular 16-bit console than Sonic and Streets Of Rage, as Nick Thorpe shows…



» [Mega Drive] Golden nodes allow Monobe to perform special actions, such as swinging on the E-Rad beam like some kind of arachnid person.



» [Mega Drive] If you're feeling aggressive, you can get up close and personal with enemies to take them out with a punch or kick.

» [Mega Drive] Monobe's E-Rad can be fired as a beam, in order to do damage to any hostile mutated creatures.

GENERATIONS LOST

■ DEVELOPER: **PACIFIC SOFTSCAPE** ■ YEAR: **1994**

■ Have you ever heard of Pacific Softscape? We wouldn't be surprised if the answer to that question is a resounding 'no' – after all, the company worked on just one game and the long-lost Sega Channel service before it disappeared into the abyss. However, that one game was certainly not a bad one, as *Generations Lost* is a very solid platformer with some light puzzle elements.

You take control of Monobe, a daring warrior of Keptan blood who seeks to discover the truth behind the past of his people. In order to do this, he must adventure through a ravaged world that bears few signs of the civilisation which had once inhabited it. For the player, what this means is a game which blends puzzle and platforming in a way that will be instantly familiar to anyone that has played the likes of *Flashback*. Monobe will occasionally fight enemies, but the main barrier to progress is finding ways to reach new areas and open doors.

Monobe's key ability is the use of his E-Rad beam, an arm-mounted energy tool which serves a variety of purposes. As a navigation tool, it can be used like a rope to both reach higher platforms and safely lower Monobe into hazardous areas, and as a weapon it can be fired in beam form. What's more, additional abilities can be granted by nodes found around the world – for example, an extended beam in the rope mode. It's not a unique ability, but it's implemented well – and that's a feeling that will become familiar as you play *Generations Lost*.

As it came out late in the life of the Mega Drive, there's no escaping the fact that it has similarities to many of its contemporaries. The game feels a fair bit like *Flashback*, and looks much like that and the *X-Men* Mega Drive game (there's a reason for that, mind – one of the artists worked on both *X-Men* and *Generations Lost*). This familiarity cost the game when it came to critical reception back in the Nineties – the general consensus was that it was solid, but didn't stand out.

That's not the only thing that *Generations Lost* has that counts against it, though. The game has quite a steep difficulty curve, perhaps to disguise the fact that it is relatively short – if you know what you're doing, the game can be finished in under an hour. However, it's worth playing for anyone looking for a Mega Drive platform game with a slightly more cerebral bent, especially if you've already exhausted the obvious choices.

What's interesting is that despite the obscurity of *Generations Lost*, some of the staff behind the game went on to higher-profile projects after the team fragmented. A few worked on the bizarre Saturn game *Mr Bones*, but musician Josh Gabriel would later work on the *Oddworld* series and designer Bruce Straley went on to direct classics for Naughty Dog, such as *Uncharted 2* and *The Last Of Us*. Sic Parvis Magna, eh?

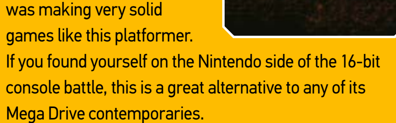
IF YOU LIKE THIS TRY...

FLASHBACK
MEGA DRIVE



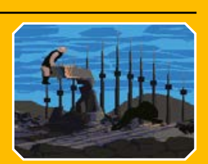
■ *Generations Lost* borrows a fair bit of its look from *Flashback*, and not to mention some of its gameplay cues, but doesn't quite live up to its inspiration. If you haven't already played this classic, we'd definitely recommend it as your starting point for cinematic platformers on the Mega Drive.

BLACKTHORNE
SNES



■ Before Blizzard conquered the world with the likes of *Warcraft*, *Diablo* and *Overwatch*, the company was making very solid games like this platformer. If you found yourself on the Nintendo side of the 16-bit console battle, this is a great alternative to any of its Mega Drive contemporaries.

HEART OF THE ALIEN
MEGA-CD



■ *Another World* is one of the most beloved cinematic platform games ever made, but its sequel doesn't get nearly the same attention due to its status as an exclusive for a forgotten platform. Despite telling a somewhat downbeat tale that displeased Eric Chahi, this is a memorable follow-up to a classic game.

IN DEPTH



VITALITY MONITOR
■ This gauge cycles from green to red as Monobe's health falls, and the dot becomes slower. If you find a gold floating platform, you'll be rejuvenated.

SWITCH HITTER
■ It's possible to use attacks while on the ground, while jumping and even dangling from rope. There's no enemy here though, Monobe's just activating a switch.

GIVE 'EM ENOUGH
■ This shows the charge level of Monobe's E-Rad beam, which is near-empty. This governs how quickly he can fire, and how long he can make an energy rope.

ENERGY ROPE
■ Monobe can use his E-Rad beam in a number of ways, depending on the situation – here he's using it as a rope to prevent himself from falling into the spikes below.

Minority Report

ELIMINATE DOWN

■ PUBLISHER: SOFT VISION ■ YEAR: 1993

■ If you're the sort of person who always felt that collecting Mega Drive games was a bit cheap and easy, *Eliminate Down* is a game that should give you a jolt back into reality. Quite apart from the fact that prices seem to be going up on Sega's system these days anyway, Soft Vision's shoot-'em-up has always commanded prices more commonly seen in the Neo-Geo market. This is due to its scarcity – it was only released in tiny numbers in Japan and South Korea.

This is a shame, because while *Eliminate Down* isn't the very best blaster the Mega Drive has to offer, it's certainly quite a good one. The game takes some inspiration from *Hellfire* in terms of its weapon line-up – by default, you have a forward shot, a spread shot and a backwards shot, which are powered up together by collecting the 'P' icons that enemies occasionally release. You'll need five to go up a level, and of course you lose a level upon death. The action is relentless, with enemies appearing from all directions and some interesting boss fights.

The game looks pretty amazing, too. There's some pretty awesome variety on show right from the first stage, where your craft descends from a battle in space to the surface of a red planet, right through a barrage of missiles. Later stages feature stunning asteroid fields and warping organic surfaces, too. Where *Eliminate Down* is less strong is in the sound department, with some energetic but ultimately forgettable tunes on offer.

It'd be hard to justify spending the kind of money that *Eliminate Down* commands on the open market, but if an enterprising publisher ever gives it a digital rerelease, you should definitely pounce on it.



» [Mega Drive] Halfway through the first stage, you'll have to endure a barrage of missiles as you descend from orbit to a planet's surface.

» [Mega Drive] Soft Vision clearly had a good handle on the Mega Drive's graphical capabilities, as *Eliminate Down* looks fantastic.

MORE GAMES TO PLAY



» ALISIA DRAGOON

■ DEVELOPER: GAME ARTS
■ YEAR: 1992

■ The collaboration between Game Arts and the animation studio Gainax casts you as Alisia, a lightning-wielding adventurer who must defeat an evil that has returned to Earth from space. You're assisted by various dragons that you can develop and switch between, though they have their own health and can be killed too. This platform game got rave reviews from magazines at the time, but never sold particularly well in any region.



» DINO LAND

■ DEVELOPER: WOLF TEAM
■ YEAR: 1991

■ We do love a good themed pinball table, and *Dino Land* is clearly inspired by Naxat Soft's pinball games such as *Alien Crush* and *Devil Crash*. Little dinosaurs wander around the table, there are prehistoric targets to smash and even a slot machine. Every so often, you'll be taken off to a boss table too. *Dino Land*'s doesn't sport the variety or excellent ball physics of the games it imitates, but makes for a good second string alternative.



» DOUBLE CLUTCH

■ DEVELOPER: ASCII
■ YEAR: 1992

■ For most, top-down racing on the Mega Drive begins and ends with the *Micro Machines* series, but this PAL exclusive is definitely worth a look. It doesn't have the speed of Codemasters' classic, but does offer a bit more depth in the form of various weather conditions, power-ups on the track and an upgrade shop that can be visited between races. Just don't ram your opponents too much – the game also includes a car damage system!



» JUNCTION

■ DEVELOPER: MICRONET
■ YEAR: 1990

■ This conversion of Konami's arcade game is every sliding tile puzzle you've ever smashed in frustration, crossed with the time limit stress of *Pipe Mania*. As the red ball makes its way around the path, you need to rearrange tiles so that it travels through the curved targets around the edge of each stage. It won't be for everyone as it's quite a difficult game, but hardcore puzzle maniacs should get a real kick out of it.

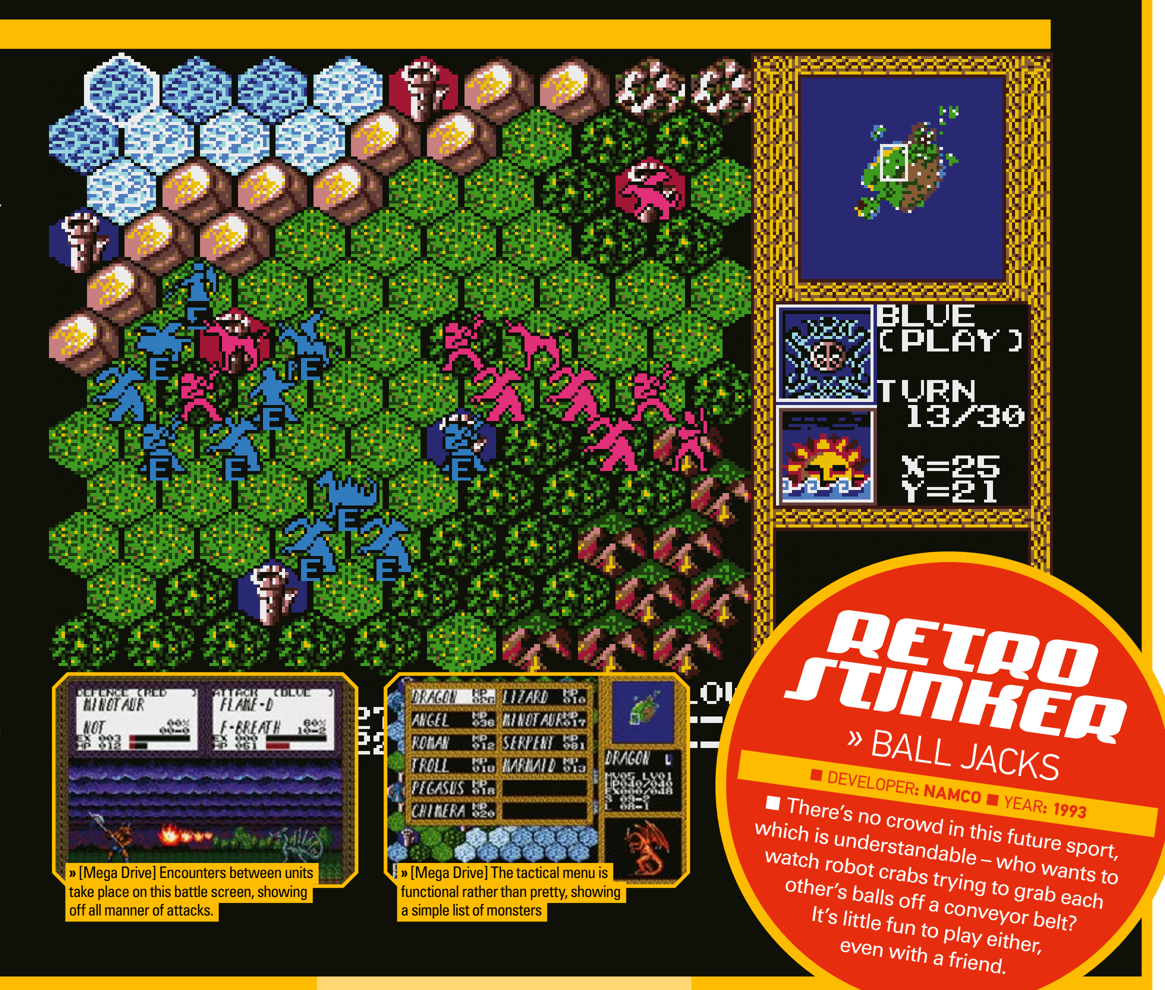
MASTER OF MONSTERS

■ DEVELOPER: ISCO/OPERA HOUSE ■ YEAR: 1991

■ Very few of SystemSoft's games ever saw a Western release, but this fantasy-themed strategy game managed to make the leap thanks to Toshiba EMI, which commissioned a conversion from the PC-88 computer platform. It's a good job too, because *Master Of Monsters* provides a welcome diversion from the action-oriented games that make up much of the Mega Drive library.

Much like SystemSoft's more famous *Daisenryaku* series, *Master Of Monsters* is a turn-based strategy game that takes place on a hex grid. In many ways, it's fairly run of the mill – you build units, capture resources, fight the enemy and seek to defeat their commander in combat. However, the hook here is that your units are all magical creatures, from dragons and Minotaurs to lizard-men. Each have the sort of characteristics you'd expect – serpents move well in the sea but are terrible on land, while a Pegasus moves fast but isn't strong. Instead of getting promotions, your creatures transform into stronger forms, and instead of artillery attacks you use magic spells. You can play with multiple factions on a single map or go for a lengthy campaign mode, which allows you to keep your transformed beasts.

It's not the prettiest Mega Drive game and the music gets rather repetitive, but there's something very addictive about the flow of *Master Of Masters*.



» [Mega Drive] Encounters between units take place on this battle screen, showing off all manner of attacks.

» [Mega Drive] The tactical menu is functional rather than pretty, showing a simple list of monsters

RETRO STINKER

» BALL JACKS

■ DEVELOPER: NAMCO ■ YEAR: 1993

■ There's no crowd in this future sport, which is understandable – who wants to watch robot crabs trying to grab each other's balls off a conveyor belt? It's little fun to play either, even with a friend.



» MAN OVERBOARD!

■ DEVELOPER: ODYSSEUS SOFTWARE
■ YEAR: 1994

■ This conversion of Zeppelin Software's Amiga game offers a huge challenge for fans of platformers and puzzlers, with 100 stages to tackle in a game that resembles *Lemmings*, but casts you as an active participant. You play as Kevin Codner (yes, really), who needs to guide passengers from a sinking ship. They're not too bright or agile, so you'll need to remove obstacles and stop them from wandering to their death.



» POWERBALL

■ DEVELOPER: NAMCO
■ YEAR: 1991

■ If you've ever felt that *Speedball 2* was a bit too fast-paced and chaotic, this similar effort might be the future sports game for you. As well as having more nuanced control over your shots and tackles thanks to a button-charging system, scoring is strictly limited to the goals at each end of the pitch – football-style goals will earn you one point, and running the ball past the goalkeeper for a touchdown will earn you three.



» TROUBLE SHOOTER

■ DEVELOPER: VIC TOKAI
■ YEAR: 1991

■ Taking control of two special operatives, you're out to rescue a prince by flying through a variety of shoot-'em-up stages. You control Madison directly and your invincible partner Crystal follows, facing either forwards or backwards. There's a bizarre sense of humour here, as the first boss initially just stands and laughs at you! This has become pretty hard to get hold of these days, which is a shame as it's good fun.



» ZOOM!

■ DEVELOPER: DISCOVERY SOFTWARE
■ YEAR: 1990

■ This unusual action-puzzle game casts you as Mr Smart, an enigmatic creature whose task is to avoid the phantoms roaming around each stage. In order to progress, you'll need to activate every tile on the screen by surrounding them with a flashing line left in Mr Smart's wake – however, some enemies can happily erase these as they go. Thankfully, you're able to jump over enemies, and even hit them with rubber balls.



Arriving late in the PS2 era, Black defied all expectations and saw a studio known for its racing game prowess stake a claim on the hottest genre at the time, the FPS. Luke Albigés interrogates Alex Ward about this popular shooter



BLACK 101

■ A loud, brash and explosive FPS that came late in the PS2's life and pushed the hardware to the limits with destructible environments, incredible set-pieces and best-in-class visuals. Launching on the eve of a new hardware generation and without online play, though, *Black* certainly had its work cut out for it.

Considering the current state of the games industry, it's incredible to think back to a time when consoles and first-person shooters were far from comfortable bedfellows. It wasn't until the PlayStation that we even saw a full-fat version of *Doom*, some five years after its PC release, and that Hammerhead was able to even get *Quake II* running on the Sony system was seen as a miracle at the time. Good FPS titles on console were, for the longest time, the exception to the rule rather than the norm, hence why the likes of *GoldenEye*, *TimeSplitters* and *Halo* are held in such reverence. After *Halo*, though, developers and publishers realised that not only had technology caught up enough to make the genre viable on console, but that there was money in it. The sixth generation was an FPS battleground, and from the arcade thrills of *TimeSplitters 2* to the darker tones of *Chronicles Of Riddick: Escape From Butcher Bay*, from the historical tension of the *Medal Of Honor* titles to the FPS-inspired reinvention of *Metroid* in the *Prime* games, this was the most important formative era for the console FPS as we know it. If you still need convincing as to how important the genre grew to be during this generation, just remember that EA was so desperate to get as much of the pie as possible that it actually signed off on an awful *GoldenEye* sequel where the protagonist *literally had a golden eye*. Yeah…



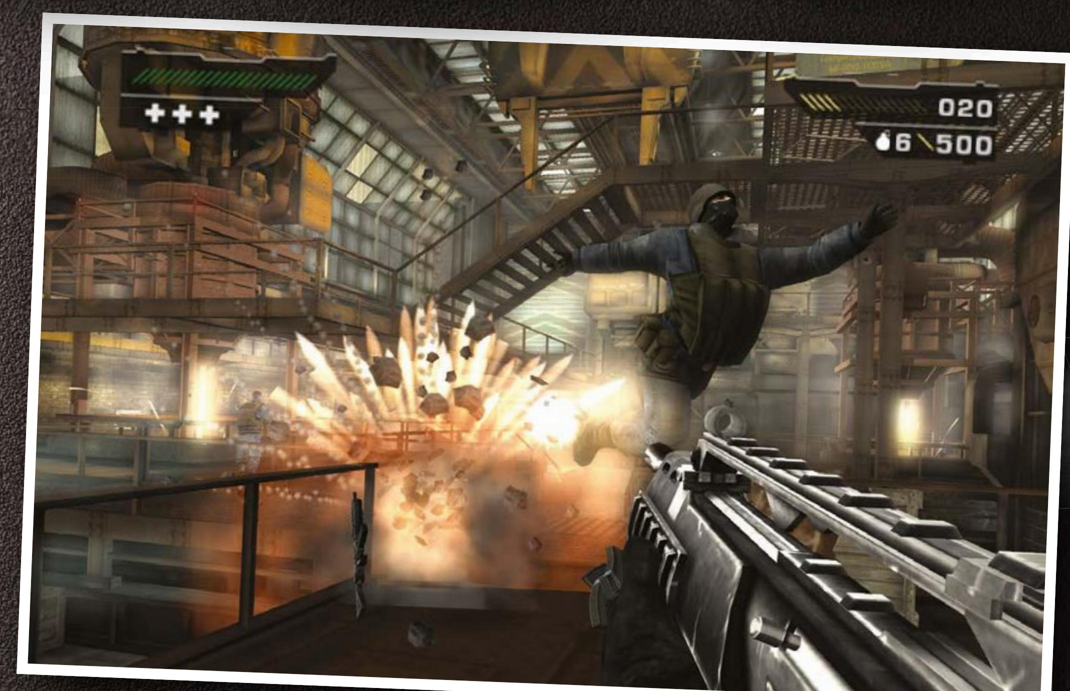
» [PS2] Guns were modelled after actual replicas. "We bought a lot of airsoft weapons to do our previsualisation," Alex reveals.

Not all additions to the genre were quite so cynical, however, and one such game that arrived in the generation's twilight was simply a labour of love from one of the most talented teams in the business. "We were doing *Burnout 3* at the time, and we first showed *Black* behind closed doors at E3," recalls Alex Ward, former Criterion boss before he left to form his own studio, Three Fields Entertainment, with fellow Criterion cofounder Fiona Sperry in 2014. "We figured that on PS2, we had a good knowledge of the machine and that we could do a good shooter. The only one we had to beat was *Medal Of Honor*, which didn't run that well on PS2 anyway, so we figured that if we could make a better game than that, we'd be alright. We built a simple level that we showed behind closed doors at E3 to American media only, so I was running between two halls in LA. That was fun. We took a lot of people out that year – we had a lot to prove, right? We were in the



» [PS2] Shortly after starting work on the ill-fated *Black 2*, the team managed to get the original game up and running on a network.





process of being bought by EA so we went to E3 with *Black*, they said, 'Don't show it, we'd rather you didn't," but I figured that if the deal fell through, we'd have missed the chance to take it to E3. As a developer, it's always good if you can have more than one E3 – show what you're gonna do then come back with more of the game, rather than do all of the game and show it."

Building on the concepts of environmental destruction (as laid out by *Red Faction*) and the thunderous weapons and explosions of Hollywood blockbusters, *Black* would have been an ambitious undertaking for any studio, let alone one known for its racing expertise. "When we started doing the *Black* prototype, the team was very small," Alex tells us. "We were just thinking about what could be done with the guns, and if we could do it. Then we were bought by EA and it was good because we were already making this game and we'd told people about it – it would have been hard for them to then turn around and say, 'No, don't do it.' After *Burnout 3*, we split the *Burnout* team – half went on to make *Burnout Revenge* and half went on to make *Black*. We used to kick off projects by making these 'Ripomatics' where we'd put together clips from movies to show people what the game was going to be." He fires up that original supercut for us and we're treated to scenes from the likes of *Predator*, *GI Jane*, *Under Siege*, *Behind Enemy Lines*, and *Three Kings*, movies that would shape the game's tone and feel long before actual development began and while these influences aren't necessarily as obvious as they may be in, say, a Rockstar game, seeing the inspiration after appreciating the piece makes some of the parallels so obvious that we wonder how we never spotted them in the first place.



» [PS2] Weapons feel like they're going to rip your hands off when you pull the trigger, and the booming audio backs up this sense of insane power.



IN THE KNOW

» **PUBLISHER:** ELECTRONIC ARTS
» **DEVELOPER:** CRITERION GAMES
» **RELEASED:** 2006
» **PLATFORM:** PLAYSTATION 2, XBOX
» **GENRE:** FIRST-PERSON SHOOTER

DEVELOPER HIGHLIGHTS

TRICKSTYLE
SYSTEM: DREAMCAST
YEAR: 1999

BURNOUT 2: POINT OF IMPACT
SYSTEM: VARIOUS
YEAR: 2002

BURNOUT 3: TAKEDOWN
SYSTEM: PLAYSTATION 2, XBOX
YEAR: 2004

BLACK

WEAPON OF CHOICE

A closer look at some of Black's thunderous firearms



UZI

■ The iconic short-range machine pistol was well-served by *Black*'s weighty gunplay and while it may lack the punch of the magnum or the kick of the shotgun, the audio work and feedback allowed this classic weapon to feel way more powerful than it does in most games, where it's typically a pathetic bullet hose.



MAGNUM

■ Hand cannons have a strong history in videogames, from *Resident Evil*'s one-shot monster to the numerous Desert Eagles found in other FPS titles. True to form, this thing feels like it would take your arm off when fired – it kicks like a mule and will punch through most things, so you won't even have to worry about anything that stands in your way.



MP5

■ One of the most versatile weapons in the world, the MP5 has long been a staple in military games and it turns out it works just as well when you drop the realism in favour of bombast. This portrayal closer resembles a modified HK-94, and there's a reason for that – the gun's firing sounds are sampled from Bruce Willis' HK-94 in *Die Hard*.



AK-47

■ We've been presented with so many crazy custom weapons and modified guns in games that it's often easy to see the classic AK as the runt of the assault rifle litter. That's a wrong that *Black* righted with aplomb, making the wood-framed automatic feel like a real beast, if one designed for rough and ready use rather than military precision.



MAC-10

■ With everything on the sound side cranked to 11, getting hold of a suppressed weapon really makes you appreciate the difference it makes – while far from silent, its bursts are still worlds away from the ear-shattering rattling of the game's other automatics. Unfortunately, the suppressor also heavily impacts range and accuracy.

The project predates even this sizzle reel by several years, however. "The idea started when we were doing the first *Burnout*," explains Alex. "We wanted to make a shooting game, but the problem to solve when making a shooter is, who are you shooting *at*? I wanted to make a shooter that was set in Russia and back in 1999, I had *The Saint* on LaserDisc – the Phillip Noyce movie with Val Kilmer, it's pretty good. So I thought, 'Can you shoot Russians?' and I figured the answer was yes – they're the enemy in a lot of films, any Cold War film. I bought a Russian watch online, because I'm a big *Back To The Future* fan." If you're wondering where he's going with that seemingly epic non sequitur, don't worry – we were just as confused when the words came out of his mouth, although the explanation makes a lot more sense. "*Back To The Future Part II* and *Part III* were filmed back-to-back, and they said if you wanted to see where the next film was going, you should look at what Doc Brown is wearing – a Hawaiian shirt with the Wild West on it," he reminds us. "So I thought it would be funny to wear this Russian watch, something that was hinting at our next game. Stupid story, but I wore this watch for about a year, in all of the *Burnout 3* interviews. It turned out to be rubbish, and it was quite expensive."



» [PS2] "It was always quicker to try and get the level stood up and make something, rather than plan it all out," Alex says.

> "Things would be broken… Me and Craig were sat there crying on Christmas Eve"
> Alex Ward

As jovial as he comes across, it becomes evident that Alex and his team went through Hell to deliver the game on time. "Looking back, it was difficult. From *Burnout 3*, we went straight onto *Revenge*," he recalls. "I was working seven days a week, as was everybody. We'd done well with *Burnout 3*, we'd just been bought and we were trying to show that we could do a good job. We went from *that* to finishing up on *Black*, which had to be finished by 4 January, which meant we were working through Christmas. We were in the office at midnight on Christmas Eve playing through… at that point, I think we had about six levels built. Things would get checked in and things would be broken. Me and Craig [Sullivan, lead designer] were sat there crying on Christmas Eve – we'd sent everybody home but we thought we'd stay and play five levels. I think we got to about level four and it crashed."

This setback was far from the first problem the team had faced. Despite grand ideas about how it would handle the game's narrative, it was apparent that there was a gaping plot hole in Criterion's skillset. "We did some experiments to see if we could do it in-game, but we just didn't have the knowledge. So we decided that we'd just film it." Alex's reasoning is solid, but even FMV cutscenes can't just be plucked out of thin air. "We'd built the levels and planned out the project," he explains. "The solution I came to was that [the game's story] had to be told in flashbacks."

RENDERWARE MAGIC

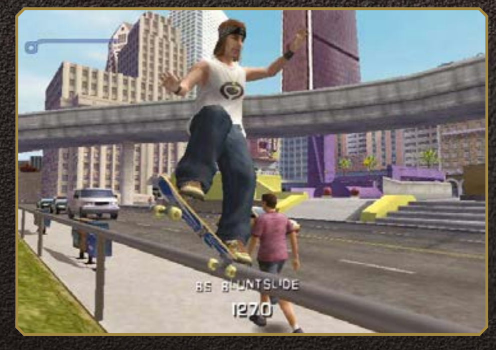
Five of the best uses of Criterion's ubiquitous engine



GRAND THEFT AUTO III

PS2, 2001

■ It may come as some surprise to learn that *RenderWare* was used in the game that defined the entire open world genre at the time. The engine's adaptability came to the fore in this seminal 2001 release – there are few better adverts for your software than its use in one of the most important games of all time.



TONY HAWK'S PRO SKATER 3

VARIOUS, 2001

■ If you're looking for an engine that can keep up with your project's insane speed, the one created by the *Burnout* team certainly wouldn't be a bad place to start. This series highlight was yet another feather in *RenderWare*'s cap, seeing the solution used in some of the biggest and best games of the generation.



» [PS2] Reviews criticised *Black* for its lack of online play, just as 2D fighters released after the polygon boom were slammed for being 'behind the times'.



» [PS2] *Black* was planned to be a franchise. "We envisaged doing two or three games," Alex confirms.

Enter a new problem for the team. "If we were doing live action, we'd have to get someone to film it for us. We'd have to hire actors and brief them. But we're in the office doing the game!" Alex goes on to explain how the project found salvation in perhaps the least likely of places – Jack Bauer's office. "We were working with a guy called Nilo Rodis who had a long career in movies, and he introduced me to a production designer called Joseph Hodges who was working on *24*. We didn't have much money so we called him and asked him to film this stuff for us as a favour and he said he'd do it." The team had experimented with a radio play approach, using abstract cutscenes with voiceover work, but the results were, shall we say, less than impressive. A new solution was needed. "Joe said, 'I'll film it live action, tomorrow, at the *24* set before everybody gets to work. Nobody needs to know!' I said 'What about costumes?' and he spoke to someone in the costume department to help us out. The actors were told to turn up at like 5am at a stage in Chatsworth, LA, and we filmed it in the CTU interrogation room very early one morning, and nobody had to know. That was our secret, and he got it all done before anybody got to work. Joseph was brilliant and pulled it together. And it came out quite well – we were pretty happy with it."

Amazingly, this crazy tale even comes full circle. "Later on in *24*, one of the characters is playing the game – you only see it briefly but I know where it is because I remember signing the approval for it," Alex laughs, and the ride doesn't stop there. "That led to John Moore [director, *Behind Enemy Lines*] and 20th Century Fox saying yes to making a movie of *Black*." He regales us with a tale of a meeting with the likes of *Predator* producer John Davis and Alex Young, who has since been producer on *The A-Team*, among other movies, and how, that in, turn led to work starting on a sequel that would never see light of day. "Fox were interested in producing a movie. All I know is that being in the middle of that whirlwind at the time was stressful. Coming out of that, I think we did about six months on *Black 2*, but in the end, we were starting *Burnout Paradise*. We were starting from scratch and didn't know how to author content on PS3. In the end, after making that decision to split one brilliant team into two *good* but weaker teams, we decided to bring the whole company back together on *Burnout Paradise*, so we stopped *Black 2*. What had been done had been sound – again, white-box stuff and some levels, and a prerendered sequence showing how we'd do better characters. It was going to take a *lot* of time and a *lot* of investment to do it. It was going to be one or the other. Looking back, I'm glad we didn't do it. *Black* was a successful game and was loved by many, but it's taken a long time to get to the point where I can hear people talk about how much they liked it and be able to not be too hard on myself. I don't look back on it as personally or professionally a great time; I can see all the things I'd have liked to have improved through the software. But hey, we survived, and I'm not going to be too hard on the younger Alex and the team." *



BURNOUT 3: TAKEDOWN

PS2, XBOX, 2004

■ While it got a lot of use in low-key titles as an easy-to-use solution, *RenderWare*'s finest hours typically came at the hands of its creators. *Burnout 3* was an incredible feat of programming, screaming along at an incredible rate while throwing around effects that made you worry your console might melt.



KILLER7

GAMECUBE, PS2, 2005

■ Further proof of *RenderWare*'s versatility, *Killer7*'s unique art style and gameplay are worlds away from any other game that used the software. *Unreal Engine* games were for the longest time identifiable by their telltale shininess, but *RenderWare* had no such hallmark – it could just about do anything, and do it well.



CRACKDOWN

XBOX 360, 2007

■ *RenderWare* was commonly seen during the PS2's dominance, but it did make a few appearances in the following generation as well. *Burnout Paradise* was the most prominent example (of course Criterion would continue to use its own tech) but this 360-exclusive also managed to apply it brilliantly to an open world setting.



Subscribe and save 25%*

Every issue, delivered straight to your door

Never miss an issue
13 issues a year, and you'll be sure to get every single one

Delivered to your home
Free delivery of every issue, direct to your doorstep

Get the biggest savings
Get your favourite magazine for less by ordering direct

What our readers are saying about us…

"The craft that goes into each issue of @RetroGamer_Mag, absolutely 10/10. First class…" @jaygavin via Twitter

"@RetroGamer_Mag Best magazine ever. Subscriber for 2 years now!" @dial999now via Twitter

"Very impressed with this months Retro Gamer (Official) magazine - some absolutely amazing articles in there . . . nice work guys." @AndyRCM via Twitter


DESERT ISLAND DISKS

FIRST JOB
Lifeguard at the YMCA
CURRENT JOB
Semi-retired
FAVOURITE FILM
All Of Me
FAVOURITE ALBUM
Rumours - Fleetwood Mac
FAVOURITE BOOK:
Creatures Of Light and Darkness - Roger Zelazny
FIRST COMPUTER/CONSOLE
OSI 6502 machine
FAVOURITE COMPUTER/CONSOLE
Mega Drive
BEST GAMING ACHIEVEMENT
2000 points on Breakout
BEST-SELLING PRODUCT:
Video Pinball (Atari 2600)
BEST HOLIDAY
Kyoto, Japan
WHO YOU WANT TO BE STRANDED WITH
Either my wife or someone with a particularly brilliant intellect, so Stephen Hawking

165-06810510303206811710З
SEX
M
NAME
Bob Smith
DATE OF BIRTH
28/07/49
PLACE OF BIRTH
Albuquerque, New Mexico
BIOGRAPHY
Bob began coding for the 2600 at Atari before jointly founding Imagic, where he coded Riddle Of The Sphinx and Dragonfire amongst others. He made games for many different platforms at Bally Sente, Accolade and 3DO.

"Getting my name on the game boxes was minor to me. With a name like Bob Smith, I'm never going to be famous!"

DESERT • ISLAND • DISKS

Bob Smith

What cherished games would you take to the island?

He may have an ordinary name but Bob Smith has had an extraordinary career, spanning four decades. He tells Paul Drury about making Imagic and how Atari went up in smoke

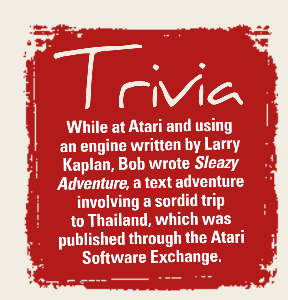
In our modern videogame world of photorealistic visuals, it is all too easy to look back at the primitive graphics of the Atari 2600 and sneer that they look like they've been drawn by a child. Well, sometimes they were. "My six-year-old son, Adam, did most of the art in *Riddle Of The Sphinx*," laughs proud dad Bob Smith. "I gave him his own pad of graph paper and I'd tweak what he came up with. He's a professor of computer science now!"

We do hope Adam still puts his stint as pixel artist at Imagic down on his CV but then his father always did combine family affairs with a coding career. Bob's first encounter with a computer was when he was building a house in the wilds of New Mexico for him and his wife, pregnant with Adam at the time, and working at a lumber yard. It was 1975 and his employers decided they might improve business by introducing one of these new-fangled computers everyone was talking about.

"I said I'd build them one," remembers Bob. "I had some experience with electronics and so I bought a Sol kit from Processor Technology, put together this 8080 machine and wrote them a few packages in BASIC to handle their inventory and sales. That was just enough to teach me… and with the computer came a little game. You shot planes that were dropping bombs and the owner's wife got totally obsessed with it. I thought, 'There's something going on here – this is going to be a major thing!'"

Suitably inspired, Bob learned 8080 assembly language and wrote *Seca*, a pseudo-3D racer in the mould of Atari's *Night Driver* and named after the Californian racetrack, which he later ported to the TRS-80 and sold to a magazine for inclusion on their cover-mounted tape. When he and his family returned to California at the end of the Seventies, he felt confident enough to present himself to Atari as a 'published game designer' and they offered him a job on the spot. "They were growing by leaps and bounds," he smiles. "I remember going to meetings and they'd say, '*Space Invaders* has sold 500,000 copies!' and everyone would go, '*Wow*!' Then the next week they'd say *Space Invaders* has sold a million! Then next time, it was two million! The money was pouring in…"

Atari was expanding rapidly and Bob ended up sharing an office with Brad Stewart, the man behind the 2600 version of *Asteroids*, who acted as a very knowledgeable mentor. After a week of settling in, Bob was presented with a list of possible game titles by his boss, Dennis Koble, and plumped for *Video Pinball*. Though Bob did play the arcade original in Atari's arcade room, he mainly played *Superman*, one of Atari's best pinball machines, for inspiration. "It was more about what was possible with the limited hardware," he explains, "but I thought it turned out really well. My father played a lot of it. That's how sons succeed!"


Trivia

While at Atari and using an engine written by Larry Kaplan, Bob wrote *Sleazy Adventure*, a text adventure involving a sordid trip to Thailand, which was published through the Atari Software Exchange.

The playing public agreed with Mr Smith Senior and *Video Pinball* shifted a staggering two million cartridges, grossing Atari around $40 million estimates Bob, which earned him a $6,000 bonus on top of his $16,000 basic annual salary. He wasn't the only programmer to question the huge disparity between what Atari was making and what it was paying its coders. "My manager at the time, Dennis Koble, talked to me and Rob [Fulop] about setting up Imagic. We kept it quiet until one day we just said, 'We're leaving today'. Ray Kassar [Atari CEO] asked to speak to us and we'd been warned he would throw money at us. Which he did. He came up with some phantom stock deal where we were all going to make out like bandits…"

The pair weren't distracted by the promise of supposed riches and left to set up Imagic with fellow Atarians Bill Grubb and Mark Bradley and a group of ex-Mattel employees. Bob's first release for the new company was *Star Voyager*, a decent space shooter which he openly admits was inspired by Doug Neubauer's *Star Raiders*. It did well and even had its own ▶



Barkley: Shut up and Jam! was Accolade's answer to NBA Jam but it didn't quite make a slam dunk.



"I was the last of the founders to stay with Imagic, the last man standing! I hung on to the bitter end…"
Bob Smith



• Riddle of the Sphinx had more camels than a Jeff Minter shoot-'em-up…

TV advert broadcast nationally, as well as crediting Bob for his work, something Atari had opposed. "Getting my name on the box was minor to me," he quips. "With a name like Bob Smith, I'm never going to be famous!"

His next project drew on his childhood in San Jose, where he lived a few blocks away from the Rosicrucian Egyptian Museum. *Riddle Of The Sphinx* featured lost temples, hidden relics and fending off giant scorpions with nothing more than desert rocks. It's charming, original and downright confusing at times – even the manual is like a mysterious book of hieroglyphics with clues and hints within its many pages. "It's a cult game rather than mainstream," says Bob. "I didn't want to do another shooter so this is something more cerebral. We used to say back then that if we could give somebody 40 hours of play, we've done our job!"

Bob's growing technical ability as well as his creative flair was also evident in his next game for Imagic. *Dragonfire* featured two action-packed screens, as your nicely-animated hero confronts an impressive fire-breathing monster, but rather than being inspired by Arthurian legend, it was the ancient game of Jacks that gave Bob the idea for the central task of looting the treasure room. "What's cool about that traditional game is when you're in the zone, you can kind of do this gestalt of motion so you can collect your jacks. That was [what became] the dragon screen and then later we realised we needed something more, so I thought of the two fireballs coming at you as you cross the drawbridge to the castle."

In a short space of time, Imagic had become a major player in the 2600 games market, its distinctive shiny boxes containing many fine titles for Atari's now aging console. Bob's own *Moonsweeper*, released in 1983 and boasting colourful 3D graphics, showed just how far they were pushing the hardware but sadly the game got caught up in the infamous videogame crash of that year. "Distribution went to hell at that point, which meant it never reached a huge audience," sighs Bob. "The market was getting swamped by lots of small companies selling cut-price cartridges of sub-standard games and Atari made some stupid decisions like manufacturing more *E.T.* carts than 2600 consoles in circulation. I was actually the last one of the founders to stay with Imagic. The others had left but I was there at the final 'let's sell our assets' auction. I was the last man standing! I hung on to the bitter end…"

Though it was the end of Imagic, it wasn't quite the end of Bob's 2600 coding career. Bruce Davis, the CEO of Imagic during its final days, struck a deal with Parker Brothers, which had the official *Star Wars* licence for another five months. He explained to Bob that if he could make a game within that tight deadline, they could release it under its license and cash-in on the huge popularity of the coin-op. "I worked day and night on that puppy but I wish I had another month," sighs Bob. "It was complete and playable but I was trying to emulate the arcade game, and I


» [Atari 2600] Bob's conversion of the *Star Wars* coin-op to the 2600 is a decent effort.

Praise for Bob

Here's what **Retro Gamer** has to say about Bob Smith's work…



Darran Jones
I would often go around my cousin's house as a youngster and play on his Atari 2600. We used to play *Riddle Of The Sphinx* for absolutely hours because we found it far easier than the *Indiana Jones* game that was available. I've not played any other games by Bob, but that one offered me hours of fun.



Paul Drury
His laid-back, affable character means chatting to Bob Smith is always a pleasure, even without any of his infamous 'home-grown'. His Imagic titles really pushed the capabilities of the 2600 and with *Riddle of the Sphinx*, he made one of the most intriguing and challenging titles on the console.


» [Atari 2600] Bob's final release for Imagic was *Moonsweeper* which showcased striking 3D effects.

Timeline

1980

VIDEO PINBALL
■ **YEAR:** 1980
■ **FORMAT:** Atari 2600
Bob's first game for Atari, this was more *Breakout* with bumpers that pinball but played rather well and sold an impressive two million copies.

1982

STAR VOYAGER
■ **YEAR:** 1982
■ **FORMAT:** Atari 2600
Bob opened his account at Imagic with this homage to *Star Raiders*. A decent space blaster given the hardware.



1982

RIDDLE OF THE SPHINX
■ **YEAR:** 1982
■ **FORMAT:** Atari 2600
Gods, goddesses, deadly scorpions, nefarious traders and obscure puzzles make this an entertaining, if bemusing, action adventure.



1983

STAR WARS
■ **YEAR:** 1983
■ **FORMAT:** Atari 2600
Bob's final game for the 2600 was an admirable attempt to squeeze the epic coin-op into Atari's aging console. Nice music, too.



Dragonfire features a tricky drawbridge approach leading to an impressive dragon.



TV Star

Imagic enjoyed huge success in its first few years of trading and even had the financial clout to produce television adverts for its key games. Bob's *Star Voyager* got its own ad, featuring big-headed aliens, kipper ties and hip-talking corporate execs in bad suits. "I still have the tape of that," laughs Bob. "*Star Voyager* was a real technical challenge to code, especially getting the star field to work with just five displayable objects and only 128 bytes of RAM. I'd have to reuse every star further down the screen. The kernel was pretty complex!" Bob has posted the original advert on YouTube for your pleasure.

needed more time to get the trench sequence right. I had [the coin-op machine] in my office and that was the level I did last. With another week, I could have gotten rid of the flickering!"

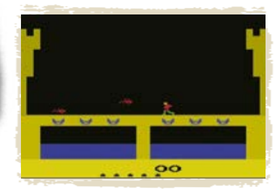
Released through Parker Brothers, the game was an admirable attempt to recreate the coin-op on the Atari 2600 and features all three key scenes of the original, as well as a stab at the iconic theme. It led nicely on to Bob's next move to Bally Sente, a company formed by various ex-Atari staff including Ed '*Battlezone*' Rotberg and Howard '*Lunar Lander*' Delman, and later bought by the founder of Atari, Nolan Bushnell. "When I was working at Atari, I knew some of the guys from the coin-op division," Bob recalls. "They were kindred spirits. They'd take me up on the roof to smoke dope."

Expectations were high. The plan was for Bob to produce the launch title for their forthcoming Sente Super System which offered a cheap way for arcade operators to upgrade their coin-op hardware, but sadly *Moonquake* never went into full production. "I was using customised Amiga 500 hardware and I coded it in 68000. You were a little robot with a jet on a rolling belt of blocks. You could move over the blocks and you could mine some for gold, some would crumble, and you could hop to different levels… it had some *Q*Bert* play from a *Zaxxon* perspective but it just didn't take enough quarters. I think people just wanted to shoot stuff…"

Prototypes of this innovative title do still exist, though all Bob has left of the project is the marquee from the test cabinet. After a brief spell at Electronic Arts, working on unreleased title *UFO*, he joined Accolade at the start of the Nineties, mainly producing tools which others could use to create games. He collaborated with old 2600 colleague Steve Cartwright, ▶

Smith on Smith

Bob picks his three favourite projects



■ DRAGONFIRE

When other people played it at Imagic I could see it was going to work. That's such a good feeling and it was a great environment to work in.



■ BARKLEY: SHUT UP AND JAM

I got to meet Charles Barkley, it was the first time I'd done motion capture and we had a great team working on it.



■ GEARS

The unreleased game I worked on at Innovative Leisure. It had a mouse running around the gears of a Rube Goldberg kind of clock.



Photo: Courtesy of Mat Allen

Bob receiving a award for his 2600 title Riddle Of The Sphinx at the 2003's CGE show.

1991



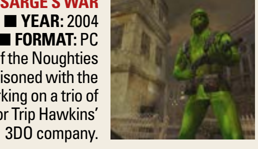
LES MANLEY IN: SEARCH FOR THE KING
■ **YEAR:** 1991
■ **FORMAT:** PC
Bob worked on the engine for *Search For The King*, though cannot be held responsible for the risible gameplay.

1992



WARPSPEED
■ **YEAR:** 1992
■ **FORMAT:** SNES
More interstellar blasting from Bob in this technically competent, but slightly repetitive shooter, released early in the console's life.

2004



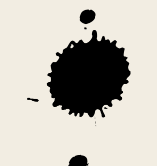
ARMY MEN: SARGE'S WAR
■ **YEAR:** 2004
■ **FORMAT:** PC
The first half of the Noughties saw Bob garrisoned with the *Army Men*, working on a trio of titles for Trip Hawkins' 3DO company.

2006



MARCH OF THE PENGUINS
■ **YEAR:** 2006
■ **FORMAT:** DS
Bob handled the conversion of this cute licence, which tried to give *Lemmings*-style puzzles a kid-friendly feel but left everyone out in the cold.





Les Manley In: Search for the King: Elvis has definitely left the building…



Readers' Questions

Greenberet79: Were you disappointed by the critical reaction to the *Army Men* games?
I think they filled a niche but then kind of overfilled it. There were just too many of them. The first one on the PC was excellent but some of the later games were a little too slapdash for me.

Paranoid Marvin: Was *Riddle Of The Sphinx* intended as a competitor to *Raiders Of The Lost Ark* by Atari and were you told to make it tougher so that the £1,000 prize was harder to get?
It wasn't influenced by the *Raiders* game, no. I still associated with the Atari guys after I went to Imagic but we never talked about what we were working on. The idea for the contest came after I'd finished the cartridge. We actually gave out the final prize at the Rosicrucian Egyptian Museum near where I lived! The winner of the contest produced this really cool, hand-illuminated scroll with the answers to all the riddles on. It was great.

Eric: Were there any programming problems you needed to solve for *Video Pinball*?
Squeezing the game into the hardware brings its own set of problems. I remember one morning I'd just finished my collision routines which detected if the ball had hit a bumper or a paddle. I was testing it and suddenly the screen starts to roll. I was a fairly new 2600 coder and thought, 'What the hell is this?!' Turns out I was taking too long to do my collision detection and that put everything out of sync… it took me a week to fix it!

Rory Milne: How big would you say Imagic could have been if not for a few crucial miscalculations? Could you have rivalled Activision?
If the market had continued to be strong, yes, I think we could've approached Activision. I thought we had some great products and some really talented developers. The fact is, though, our distribution never got to the levels of Atari and Activision. And remember, Atari salesmen were saying things like, 'If you put an Imagic cartridge in your 2600, it will damage your console.' That kind of stuff was going on.

"The guys at Atari's coin-op division were kindred spirits. They'd take me up on the roof to smoke dope"
Bob Smith

Trivia

In 2012, *Time* published an article about Innovative Leisure, including some fantastic photos of Bob and his fellow industry legends. You can find it at bit.ly/timefounderofvg.

the man behind Activision hits such as *Barnstorming* and *Frostbite*, and Mike Berlyn to create a new parser for graphic adventure *Altered Destiny*, and continued the partnership for *Les Manley In: Search For The King* and its sequel, *Lost In LA*. These adventures, which feature depressed circus performers, elephant-dung shovelling and dream stealing, have often been dismissed as *Leisure Suit Larry* clones but we wondered what Bob thought of the pair? "I stayed clear of the content. I was in plenty of meetings about [the gameplay] but decided to keep my mouth shut," he replies, diplomatically.

In 1992, Bob returned to game design and familiar space battle territory with *WarpSpeed* for the then-recently-released SNES. "For that game, I built model spaceships from pyramids and cubes so I could ray trace them from all different angles and use them for graphics in the game," he explains. "Each ray trace would take about 24 hours! I also did the Genesis version and far preferred working on it to the SNES thanks to the 68000 processor. "

His Mega Drive work continued when his boss at Accolade, Al Miller, invited him to meet up at a local arcade, where they spent an entertaining few hours playing Midway's, *NBA Jam*. "Al said, 'Can you do something like this?' He knew I was technically competent so if anyone could do it, I could…."

And he did. Bob spent an afternoon with basketball legend Charles Barkley and pitched the idea of a game focussing on street ball, which avoided the difficult and costly process of getting a licence from the NBA to use real team names and player likenesses. After also working on the sequel to *Barkley: Shut Up And Jam*!, a series that never emerged from the shadow of *NBA Jam* which had inspired it, Bob enlisted for duty on the *Army Men* franchise and remained part of the squad for the next five years.

"Oh what can I say about *Army Men*?" he mutters. "Trip [Hawkins – CEO of 3DO] was on a hiring binge so I ended up at 3DO. There were some good people working there, like Howard Scott Warshaw and Rob Zdybel who I knew from Atari, and the original *Army Men* PC game was pretty good, I thought. But the three games [I worked on] were a low point of my career. They just weren't that inspired. It was a real trial but it kept food on the table."

After the collapse of 3DO, Bob joined *Skyworks* in the mid-Noughties, the latest venture from Gary Kitchen, who made his name coding *Donkey Kong* for the Atari 2600. After some forgettable projects, he got to work on ports for the Nintendo DS and found the handheld a pleasure to code on. "The DS was fun and like a SNES, so I was all set," he grins. "I did a version of the *New World Bible* for it. I didn't want to do any more shooters. Hey, I was a conscientious objector during the Vietnam War. I come from that era… yeah, I wore flowers in my hair at times."

In 2010, when many men in their sixties might have been thinking about retirement, Bob joined a handful of fellow industry legends from the golden age, including Ed '*Asteroids*' Logg and Tim '*Armor Attack*' Skelly, at Innovative Leisure. The plan, hatched by Seamus Blackley of Xbox fame, was to buddy up these seasoned game designers with a new generation of coders and artists to create original iOS titles but despite producing some promising prototypes, including the epically-titled *Draconis Rex*, none made it to market.

Undeterred, Bob is still making games and revisited a concept left unfinished when Imagic went under. Inspired by the *Wizardry* series, the 2600 title features a 3D maze and a range of monsters and weaponry, and was donated by Bob to the National Videogame Museum in Dallas, Texas.

"I can't stop!" he laughs. "I still have lots of ideas I want to do. I'm going to live till I die!" Another great idea from a creative legend of videogames. *

Thanks to Martyn Carroll and Mat Allen for their help.

Bob Smith's Desert Island Disks

The games that Bob simply couldn't live without

01 Heroes of Might and Magic 5 (PC)
I'm still playing this! It's deep and incredibly replayable. Well thought out and tuned. An excellent game. I have been playing since the third in the series and I've liked them a lot.

02 Shogun: Total War (PC)
I'm something of a Japanophile. It's well done and I like the history. I've always liked the *Civilisation* type of games but found *Civilisation* itself a little tedious. This, I think, really works.

03 Sid Meier's Pirates (PC)
Another great game. I enjoy the geography and the way it lets you explore its world.

04 Railroad Tycoon (PC)
I've played through every one of the series. I just really like the Sim-style of games.

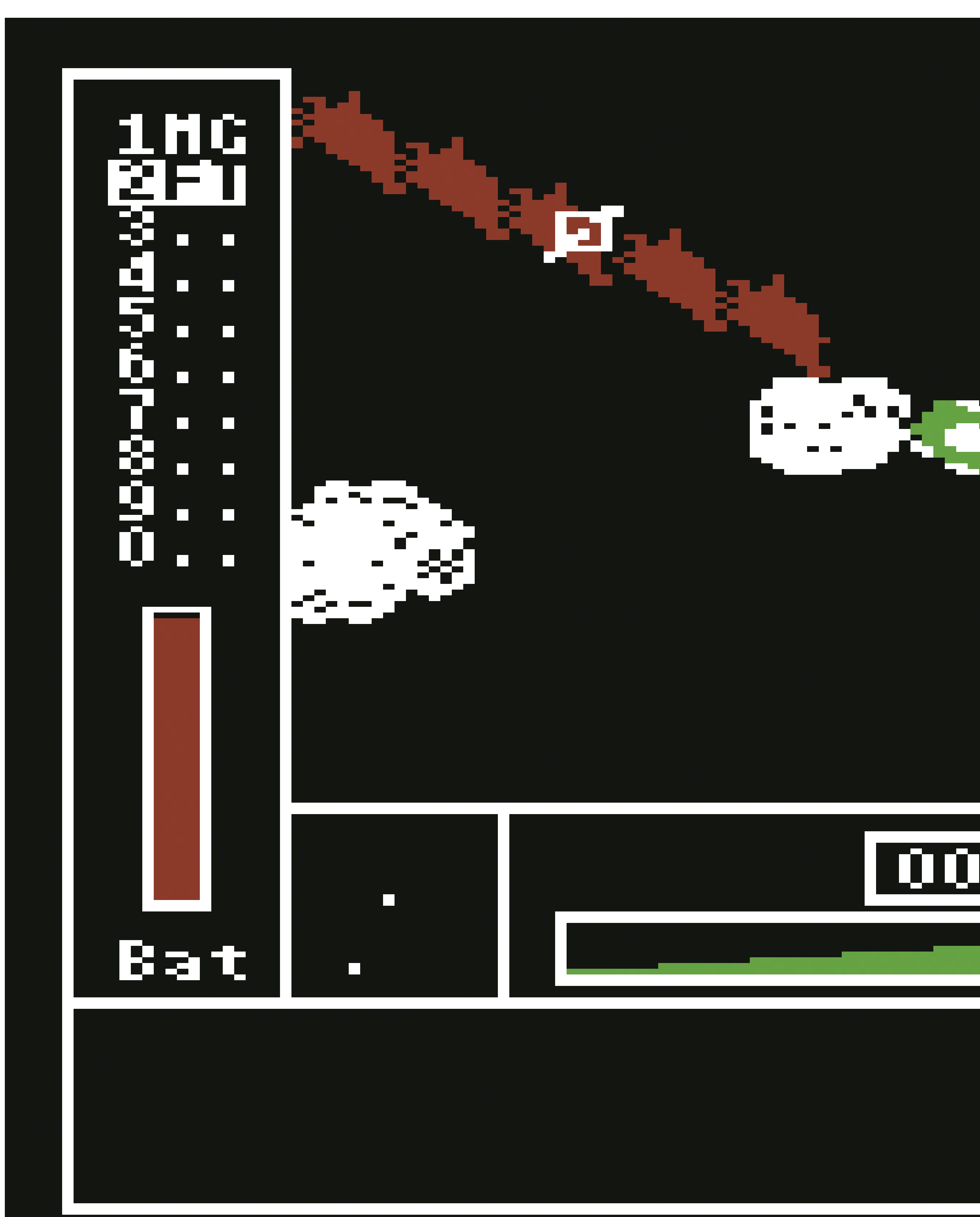
05 Rootin Tootin (ARCADE)
One of my favourite coin-ops is this incredibly obscure game. I used to have a *BurgerTime* machine in my house that actually loaded from tape and it had another game with it, called *Rootin Tootin*. You're being chased by pianos!

06 Star Wars (ARCADE)
I got pretty good at this when I was coding the 2600 version, though they didn't give me the sit-down cabinet, sadly!

07 Battlezone (ARCADE)
Just before I left Atari, I shared an office with Carla Meninsky who was doing the 2600 conversion of *Battlezone* so we had the cocktail cabinet in our office. Atari was so crowded at that point they put us out in a trailer but that was okay – it was private and we could smoke dope out there.

08 Battle of Polytopia (iOS)
I've been playing some iOS games recently and this is one I've really enjoyed. It's kind of *Sid Meier's Civilisation* compressed into 30 turns.




1MC
2FU
3
4
5
6
7
8
9
0
Bat

» RETROREVIVAL

Autoduel

FAIL TO PREPARE, PREPARE TO FAIL



» **COMMODORE 64** » **ORIGIN SYSTEMS** » **1985**

A person can learn many things from videogames, and I've definitely done so. I learned the names of many American cities from *Rampage*, *Catherine* taught me that I'd be a horrible partner, and *Streets Of Rage* imparted the wisdom that most wounds can be healed by eating roast chicken, a meal commonly found in roadside bins. *Autoduel* taught me that if I were to awaken to a world where my survival depended on my prowess in vehicular combat, I would be dead by teatime.

Don't get me wrong, it's not my gladiatorial skills that would get me killed – I'm a master of the single-button C64 joystick, and while I've never driven a car nor fired a gun, I'd imagine that they're operated in a very similar fashion. No, my downfall would be the meticulous planning that seems to be involved in automotive battles. Regardless of how I configure my driver, vehicle or weaponry in *Autoduel*, I seem to get it very wrong the first time around. The inevitable result is that I leave the arena with my tail between my legs, often with the added indignity of having to do so on foot, and experiment with a new approach.

But if I were thrust into that situation in real life, there wouldn't be a second chance – I'd be incinerated by someone else's flamethrower or riddled with machine gun bullets, and that would be it. If only I were the sort of person with the foresight to head to Gold Cross and get myself cloned… *

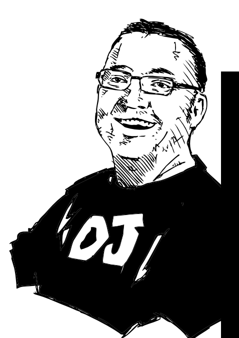
Arm
F 07
B 06
L 04
R 06
V 02

Trs
04
04
04
04



Power Plant 05

Driver 06



>> This month Darran's been immersed in Capcom's new horror game, Nick went back to the Eighties and played Yakuza, while Drew revisited Dragon Quest VIII, courtesy of the 3DS


» [PS4] The Baker family are the main antagonists of *Resident Evil VII*. Be nice to them or you'll be sorry.

Resident Evil VII biohazard

THE FAMILY THAT STAYS TOGETHER SLAYS TOGETHER

INFORMATION

- » **FEATURED SYSTEM:** PS4
- » **ALSO AVAILABLE ON:** XBOX ONE, PC
- » **RELEASED:** OUT NOW
- » **PRICE:** £54.99 (£34.99 PC)
- » **PUBLISHER:** CAPCOM
- » **DEVELOPER:** IN-HOUSE
- » **PLAYERS:** 1



When *Resident Evil* first appeared in 1996, it not only altered the public's perception of what a horror game could be, but also coined a whole new genre – survival horror. Capcom reinvented the wheel again in 2005 with the release of *Resident Evil 4* and now it's having a third stab at revitalising its 21-year-old franchise. Worry not, though, for while this new entry may sport a brand-new first-person viewpoint and a Deep South setting, this is the same old *Resident Evil* that has been horrifying gamers for over two decades.

We're loathe to spoil too much of *VII*'s story, as it's arguably the best of the series – although that's admittedly not a high bar to clear – so let's just say that it's set four years after *Resident Evil 6* and focuses on Ethan Winters' search for his missing wife, Mia. As he arrives at a seemingly-abandoned plantation mansion, he discovers that the building's residents, the Bakers, are not only very much alive, but are harbouring a deadly secret that neatly ties them to the schlocky over-the-top bio-weapon shenanigans that the series has become so famous for.

The Baker's aren't just integral to *VII*'s mature story, they also double up as the game's bosses, making for terrifying opponents, particularly when facing off against them in the game's astonishing VR mode. Patriarch Jack has shades of both *Resident Evil*'s Nemesis and *Outlast*'s main villain, in that he keeps on coming back at you, again and again, seemingly impervious to all the damage you mete out against him. You'll eventually have to deal with each member of the family in some way, and it's refreshing how Capcom ensures that each skirmish always feels markedly different, with your encounter with Lucas (who has created an elaborate kill room from which you must escape) being one of the most memorable.

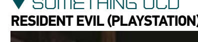
If *VII*'s boss encounters are thrilling and inventive, the same can't be said for the Molded, the new major enemies that doggedly hound you around the treacherous mansion whenever the


» [PS4] As spooky as exploring the Baker Mansion is, it becomes an even more terrifying experience when playing in VR.



BRIEF HISTORY

» The original *Resident Evil* was released in 1996 and became an instant hit, spawning two popular sequels on the PlayStation, before moving to the next gen with *Code: Veronica X*. The series took on a more action-based form with the release of *Resident Evil 4*, while the most recent game in the series, *Revelations 2*, used an episodic format.



✱ WHY NOT TRY

▼ SOMETHING OLD
RESIDENT EVIL (PLAYSTATION)



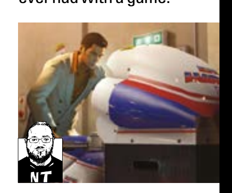
▼ SOMETHING NEW
OUTLAST (XBOX ONE)



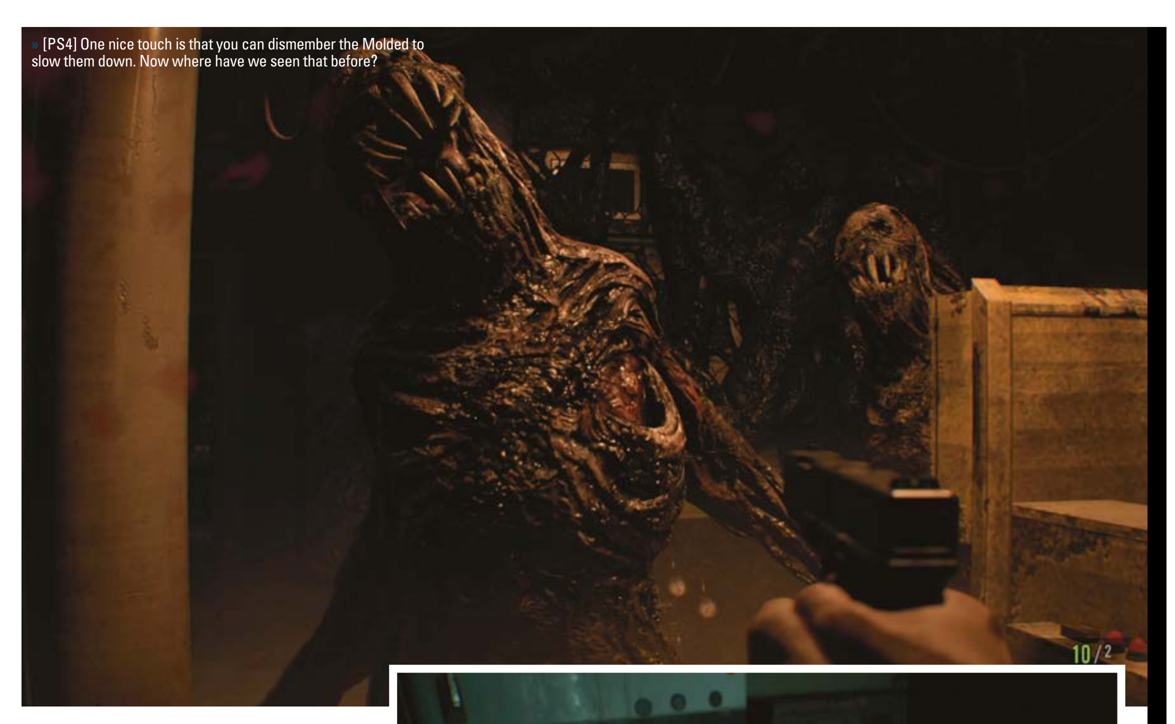
✱ PICKS OF THE MONTH



DARRAN
Resident Evil VII: biohazard
I've completed it in VR and it's one of the most tense, terrifying experiences I've ever had with a game.



NICK
Yakuza 0
An epic offering from Sega that's not only steeped in Eighties nostalgia, but also lets you play *Out Run*!


» [PS4] One nice touch is that you can dismember the Molded to slow them down. Now where have we seen that before?

Bakers are recuperating. Despite coming in a variety of forms and featuring nods to earlier *Resi* enemies, they simply lack the scare factor of earlier villains (although they become far more terrifying when you come face-to-fang with them in VR). Indeed, it is largely clever sound design and masterfully-timed jump scares that account for most of *Resident Evil VII*'s 'shit your pants' moments – not its slimy new enemies. Even though you have access to plenty of classic *Resident Evil* weapons, you'll still be wary about exploring the decaying building and its surrounding constructions as you never know what gruesome scare will be around the next corner. It's admittedly not as unsettling as the dark promises made by Konami's *P.T.* (it's a different kind of horror, for starters) but it still manages to emotionally gut-punch you when you least expect it.

Just as the choice of fixed cameras in *Resident Evil* made it such an unsettling experience to play, Capcom's use of first-person becomes equally oppressive, particularly when donning a PSVR headset. Capcom's excellent new engine means your tour of the Baker's home is a suitably unpleasant experience, with the detailed visuals showing every decayed board and cracked piece of wallpaper found within it. It's not quite up to the photorealistic look of *P.T.* but they'll be plenty of times you'll simply not want to continue because the locations you need to explore look so foreboding and ominous.

It's worth noting though that while this is a new direction for *Resident Evil* in many ways it's also refreshingly familiar and it's telling that after the mess that was *Resident Evil 6*, Capcom has gone back to basics and set its game in another dilapidated, but memorable, mansion. Herbs need to be collected and can be enhanced by combining them with other items, manipulating items reveal hidden clues or useful lockpicks, while elaborate-looking ornate keys are needed to access blocked off rooms. Inventory management is near-identical to the original game (although picking up handy backpacks gives you far most slots) and many of the puzzles also have an air of déjà vu about them. This is old-school *Resi* presented in a brand new way and it works exceptionally well, breathing some much-needed life into what some felt was a stagnating series.

» [PS4] The inventory system feels slicker than the original, but you'll soon find yourself running out of space.

We've really enjoyed our time with *Resident Evil VII*. It takes well-known horror tropes and presents them in new and interesting ways, has some fantastic nods to the earlier games and is genuinely unsettling with great boss encounters, strong themes and interestingly written characters. By going back to the franchise's origins, Capcom has rediscovered the terror that plagued the PlayStation generation and rebottled it for a brand-new audience to enjoy. Excellent horror offerings such as *Outlast*, *Amnesia* and *Alien Isolation* means that certain aspects of *Resident Evil VII*'s design will feel a little familiar to fans of the genre in general, but it remains a tremendously exciting ride all the same. It's arguably the high point of the series since *Resident Evil 4* and deserves to be experienced by anyone with a hardy constitution. ✱

In a nutshell

A bold new direction for horror games and an incredibly polished Resident Evil experience that proves that Capcom still hasn't forgotten how to scare the bejezus out of you.


>> Score **90%**

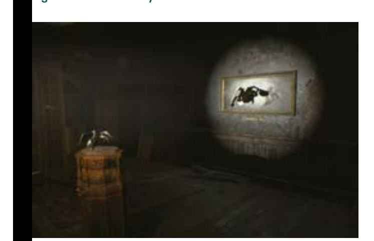
✱THE VR VERDICT



As good as *Resident Evil VII* is, it becomes insurmountably better when experienced in VR. Exploring the mansion is taken to a whole new level due to its utterly immersive nature and awe-inspiring sense of scale. It's improved mechanically too, as the nature of VR means you can peer around corners to shoot enemies, or look through windows in a way that simply isn't possible during normal 2D play. Combat is equally improved as tracking with your head makes taking down enemies far easier than it is when playing it in 2D.

It's worth noting though that as astonishing as *Resident Evil VII* is in VR (and it's currently the benchmark of what it possible with the format) the aggressive nature of some of the boss fights means that you're going to need a healthy set of VR legs if you intend to finish the entire game via virtual reality. Thankfully, Capcom has created a large number of options that should make your experience in VR as comfortable as possible, meaning anyone who has access to VR will be able to experience the best game on the format.


» [PS4] Jack Baker turns up at various points of the game and makes your life hell.


» [PS4] While the puzzles aren't taxing, there are a few gems that will leave you stumped for a while.

PICK OF THE MONTH

Fire Emblem Heroes

» **System:** iOS (tested), Android » **Cost:** Freemium » **Buy it from:** Google Play, App Store

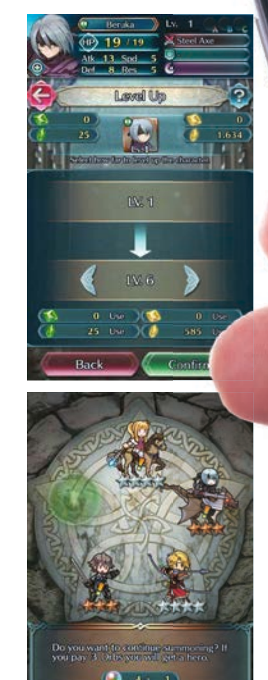
Nintendo has huge plans for the *Fire Emblem* series in 2017, with *Heroes* being the first of four games that the company has planned for release.

The story behind *Heroes* is simple: portals to various *Fire Emblem* worlds have been opened, meaning your ragtag group of heroes have to battle classic characters from the series before they will stop their invasions. It's not the most exciting story when all is said and done, but it does the job and allows you to battle the franchise's most iconic heroes along the way.

One of the most impressive aspects of *Heroes* is just how much game you actually get for free. It's entirely possible to slowly plough though the entire story mode of the game, and there are additional Paralogues and special events to tackle, too. Doing anything in *Fire Emblem*, whether it's taking part in the next chapter of a story or training your characters requires stamina and one point of stamina recovers every five minutes. Orbs are the main currency and can be used to upgrade your castle and barracks (which adds more experience or expands the number of characters you can house) and restore stamina and Dueling Swords (which are used for the Battle mode). Lastly, and most importantly, orbs are also used to get random heroes from the *Fire Emblem* universe, which can greatly bolster your chances of success.

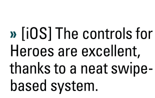
It's somewhat disappointing, then, that for all its slick presentation and free game *Heroes* is a little basic and nowhere near as absorbing as traditional games in the series. The small playing grid and team sizes (only four heroes on each side) allow little room for in-depth tactics, meaning hardcore fans will find it all dissatisfying. Rather than see it as the next big release, just look at *Heroes* as a side story to the core games – in that respect it works perfectly.

>> Score **68%**







» [iOS] The controls for Heroes are excellent, thanks to a neat swipe-based system.



Yakuza 0

» **System:** PS4 » **Buy it for:** £44.99 » **Buy it from:** PSN

Every long-running franchise seems to do the inevitable origin story prequel, but we can't begrudge *Yakuza* this indulgence – it's an excellent slice of Eighties Japan. As in previous *Yakuza* games, the main meat of the experience is a series of 3D beat-'em-up battles tied together with a mystery concerning the shadowy dealings of organised crime groups, which is more accessible than recent games due to the prequel conceit.

It's the awesome array of distractions that allows the game to truly shine, though – bizarre side quests like teaching a punk band how to be hardcore, gloriously cheesy karaoke sessions (complete with hair metal fantasy scenes), and even retro arcade games like *Space Harrier* and *Out Run*. It's all been pulled off with a great degree of polish, and it's a unique experience.

>> Score **91%**





Dragon Quest VIII: Journey Of The Cursed King

» **System:** 3DS » **Buy it for:** £34.99
» **Buy it from:** Retail, online

A glance at the image above is evidence enough to show that *Dragon Quest* has aged as gracefully as Keanu Reeves – in that it hasn't aged at all – thanks to its futureproof art style.

Squeezing the PS2 game onto the 3DS hardware is no easy feat, either, and Square Enix has done a cracking job at optimising the game to make it perfect for the handheld.

The gameplay is standard JRPG fare by this point, which is perhaps the only thing that truly dates *Dragon Quest VIII*, however, if you enjoyed the original title, or have a passing interest in the *Dragon Quest* franchise, you can't go wrong with this near-perfect port of arguably the best game in the series.

>> Score **85%**





Atelier Shallie Plus: Alchemists Of The Dusk Sea

» **System:** PS Vita » **Buy it for:** £34.99 » **Buy it from:** PSN

This RPG casts you as an alchemist, trying to get to the bottom of the world's dwindling water supply in one of the few oasis towns left. However, you get a choice of two Shallies – Shallistera, a visitor from afar who seeks to save her own village, and Shallotte, a local alchemist.

Much like previous games in the 20-year-old series, your quest involves gathering items from the outside world through foraging and battle, crafting them into new ones via alchemy, and using them to complete tasks. Older games had a time limit, but *Atelier Shallie* drops this and allows you more time to enjoy the world and hunt rare items. The only major blemish on the otherwise solid experience is poor optimisation – frame-rates can drop to unacceptable levels.

>> Score **78%**











» [Intellivision] See, carrots *are* good for you – they give you 'Carrot Power'.

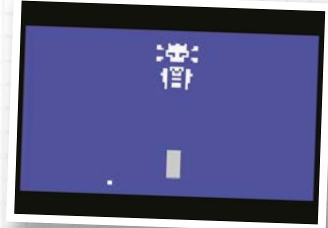
PRESENTS AND COMPETITIONS

The latest edition of the MSXdev competition has recently been launched and already has its first entry in the form of a one-button shoot-'em-up called *SKULLrs*. In this game, a large enemy battleship has a devastating weapon which can be fired from another dimension, and only intercepting the beam can save the universe. The random elements and limited playfield make *SKULLrs* incredibly frustrating to play, however we're pleased to see that a first entry has been submitted for the 2017 MSXdev competition. Kikstart.eu/skullrs-msx has the game download or, alternatively, you can visit Kikstart.eu/msxdev-2017 for the latest news from the event.

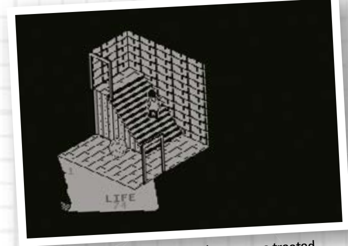
The Atari 8-bit community has received an interesting Christmas present in the form of isometric 3D title *Fairlight* from code reworking genius Mariuszw with some able assistance from Jose Pereira and Wieczoron. The code has been built using the C64 release as a base and Kikstart.eu/flt-a8 goes to the Atari Age discussion for the download and some screenshots of this new version in action. Atari 8-bit presents continued into the start of 2017, too, with a couple of fun little games included with the now-traditional *New Year's Disc*, the link for that can be found behind Kikstart.eu/nyd-2017-a8.

Mazeract on the Spectrum is quite an unusual title. At first glance it looks like a simple puzzle game with the story beginning as the player-controlled warehouseman reaches the end of his shift and starts heading for home, only to find that the exit doesn't lead where he expects it to. There's a fairly creepy atmosphere throughout which is only added to by the player character's internal monologue and the cryptic messages he finds lying around. Kikstart.eu/mazeract-spec heads over to the World Of Spectrum forum thread where the game can be explored further.

Finally, we have *Hotel Bunny*: a simple action game for the Intellivision where a colony of rabbits are in need of help if they are to reach safety. Each bunny starts at the left-hand side of the screen and, when prompted by the player, will whizz across to the right while hopefully passing all of the patrolling hazards in the way. The furry creatures can't be steered while in motion so good timing is required, but there is a limited amount of 'Carrot Power' available when holding the fire button which will temporarily protect the current bunny from harm. The link Kikstart.eu/hotel-bunny-intv takes you to maker Sebastian Mihai's website.



» [MSX] There's an invasion coming and stopping it is very difficult.



» [Atari 8-bit] Fans of 8-bit homebrew were treated to a deluge of New Year gifts.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **darran.jones@futurenet.com**



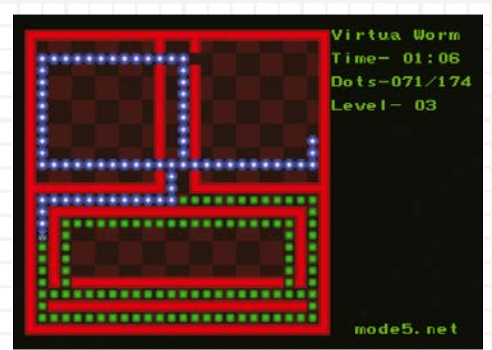
» [SNES] A boss is approaching.

ONGOING VOYAGES

Horizontal Shooter for the SNES is… well, a horizontal shoot-'em-up for the SNES, so it does exactly what it says on the tin! The player has a spaceship under their control and enemies move past which need to either be avoided or, preferably, shot.

Despite being called version 1.0 this does seem to still be a work-in-progress, but we still enjoyed the simple blasting action that can be downloaded from the programmer's Github behind Kikstart.eu/horizontal-snes Hopefully, this will evolve into something more feature laden in the future.

"Despite being called version 1.0 this seems to be a work-in-progress"



» [Mega Drive] Do virtual creatures eat virtual snacks?

A SLIPPERY SNAKE

Virtual Worm is based on a web-based version of the old 8-bit game that is often called *Nibbler*. The player's snake is led around the playfield to devour food, but each time something is consumed his tail extends by one unit so the challenge is to clear each board without accidentally becoming trapped in the process.

Kikstart.eu/virtual-worm-md goes to the Sega 16 forum's announcement thread where there's a download and a video of the game in action; there are a weighty 15 levels in there and the difficulty ramps up pretty quickly, so prepare yourself!

HOMEBREW HEROES

It seems that Keith Sear likes bullets a lot; his first Z80 assembly language game is Chibi Akuma(s) which has thousands of them! We spoke to him about making an Amstrad CPC juggle projectiles





***Chibi Akuma(s)* is your first assembly language game, how long did it take you to code?**

[The time] from starting to learn assembly to releasing the game was five months. The first code I wrote was the sprite routine, though I rewrote it about four times as I got better at assembly, adding new features and heavy speedups.

Did having so many projectiles have any impact on the other elements of your game?

Yes! I had to change the continue variable from four bits (16) to eight (255) because the game was so hard! The entire game was written around making things as fast as possible, everything had to try to work with single byte variables for efficiency and that limited the way the enemies could move. The game engine is optimised for 24-pixel sprite size, which limited enemy design a lot! The plan was always to have few enemies and many bullets – the reason for this was the regular CPC has no hardware sprites, so focusing on 'dot' bullets rather than sprite enemies played to the systems strengths.



» [Amstrad CPC] Not the most hospitable of environments if we're honest.

And were there any stand out moments during the development?

Just finishing it! There were a lot of days where it was crashing, and I didn't know why or how to fix it – somehow I did. I spent most of the five months thinking I would never finish the game.

One big breakthrough was when I figured out how to do the game loop without the firmware, this brought an instant speed boost and let me use the shadow registers to speed things up even more. The other one was the 'Omega Array' weapon of the final boss – which is capable of over 1,000 onscreen bullets – I had decided what I wanted to do, then spent four days trying to figure out a way of doing it!

What kind of feedback have you had from gamers?

With such a crazy game style the response has been surprisingly good, although I haven't really tried to read user comments! I didn't make this game to be popular – I mean, the game character insults the player irrespective of how well they do – I put all the ridiculous stuff I wanted to see, if people like it then great! If not, it's no loss to me… I write software professionally, and CPC programming is a chance to make exactly what I want!

Can you tell our readers anything about the next instalment?

It will be a straight sequel, so more bullet hell… I wanted this game to have nine levels and two playable characters – hence why it's called *Chibi Akuma(S)* – but I realised that I was pushing my luck, so I scaled my ambitions back. The next version will have five extra levels, introduce Chibiko's brother and hopefully two-player simultaneous play.

The game engine will be upgraded and I plan to rerelease the existing game with the new engine.



» [Amstrad CPC] "Their house is a museum where people come to see 'em".



One of very few action games utilising the Amstrad CPC's high-resolution Mode 2 is *Fres Attack*, a blaster from developer Bollaware in 1992. The gameplay is typical space-bound dog fighting against a range of enemies that swirl around the play area; the player craft has some shielding and downed enemies sometimes leave behind helpful power-ups too. Pilots will also need to be on their guard because there are scrolling backgrounds which move at an alarming speed and are immediately fatal.

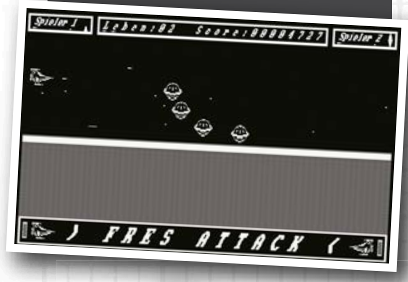
There isn't anything original about *Fres Attack* but it is a well-implemented game that should appeal to all shoot-'em-up fans. It's difficult, but the attack patterns can be memorised and there's an option for two players so a friend can help out. Head on to Kikstart.eu/fres-attack-cpc.

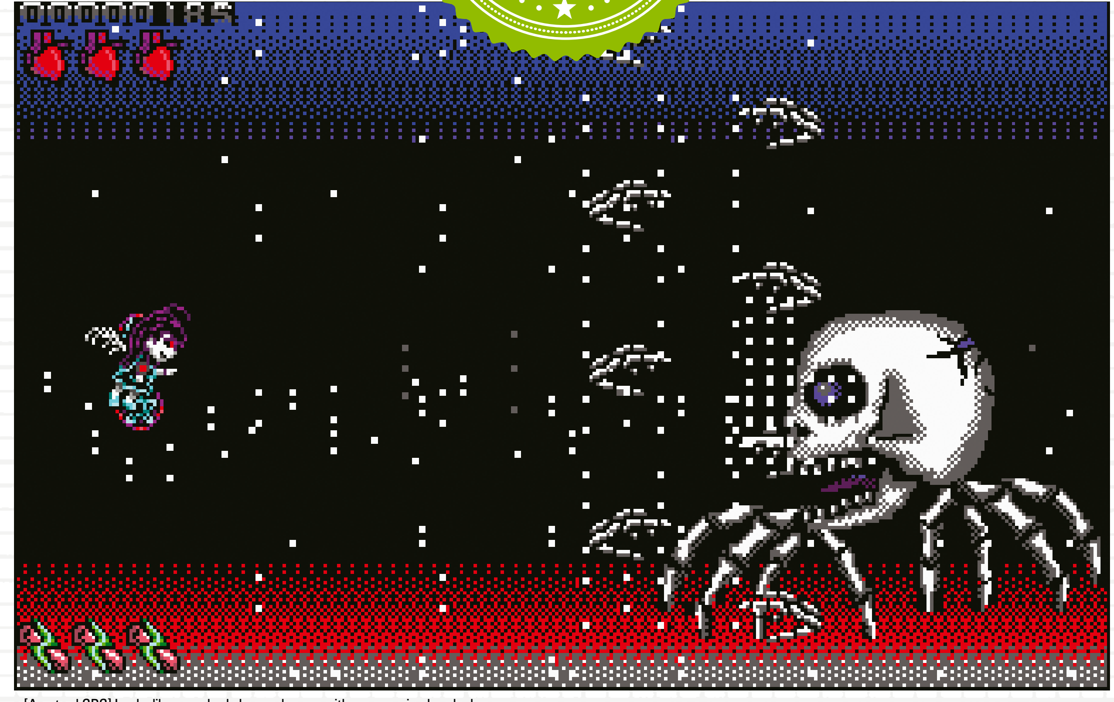


» [Amstrad CPC] Weaving between the waves and their bullets.



» [Amstrad CPC] Could the Illuminati be invading from outer space?

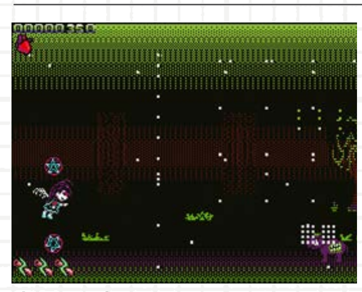




» [Amstrad CPC] Looks like somebody has woken up with a screaming headache.

CHIBI AKUMA(S)

» **FORMAT:** AMSTRAD CPC » **DEVELOPER:** KEITH SEAR » **DOWNLOAD:** KIKSTART.EU/CHIBI-CPC » **PRICE:** FREE



» [Amstrad CPC] The weather report didn't say anything about it raining bullets.



» [Amstrad "CPC] "We've got spooks and ghouls and freaks and fools".

It was divine intervention that killed the vampire Chibiko, but being banished from the underworld has left her in a particularly bad mood and her nights are spent killing villagers to harvest their blood. So the invasion of the castle she calls home from a hoard of vile creatures who want to see her dead all over again couldn't have come at a worse time… for them at least, because going up against a flying vampire with a mastery of the dark arts is already bad enough even if she isn't annoyed at being woken up!

Chibi Akuma(s) is a scrolling shoot-'em-up with a serious bullet fixation – the enemies emit them constantly and surviving the onslaught will take quite a bit of skill. There's two fire buttons for aiming bullets left or right since enemies can come from either direction and holding one of these buttons down will, along with releasing a flurry of projectiles, cause our antihero to 'focus', slowing her movement down and pulling in any satellite-style magical weapons she has – collected from power-ups that float past – closer to concentrate their firing. The barrage of bullets Chibiko faces might seem ridiculous to begin with, but her collision area for them is very small which is essential considering how many there are on screen at once and, when the fire button is being held down, the slower player movement makes weaving between individual shots more viable but even a momentary slip in concentration can potentially result in the loss of life.

This is a slower-paced game in part because it's dealing with so much at once; we left the options on their default settings and, after putting in a little practise, managed to get through most of the game with the allotted 20 continues – each of these lets the player continue from where they died with three new lives – and there are options to dish out over two hundred credits or tweak the difficulty level so most players should find settings that suit their abilities.

» Score **85%**

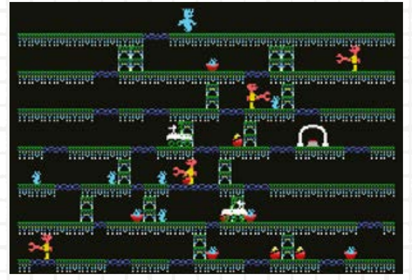
Don't forget to follow us online for all the latest retro updates



 RetroGamerUK  @RetroGamer_Mag  darran.jones@futurenet.com

LIZARD WILLY

» **FORMAT:** MSX » **PRICE:** FREE
» **DEVELOPER:** SFRANCK72
» **DOWNLOAD:** KIKSTART.EU/LIZARD-WILLY-MSX



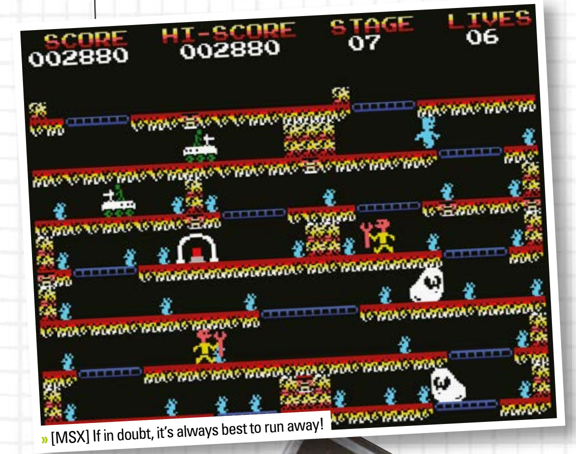
» [MSX] "Blue are the streets and all the trees are too".

Our titular character, Lizard Willy, and his offspring are all being held captive in a laboratory full of platforms. Willy can only move horizontally or downwards when standing on blue teleportation devices in the floor and collect all of his offspring will see him progress to the next stage.

There are items to collect dotted around the screen and enemies patrolling most of the platforms which have to be avoided, either by teleportation or relying on the strange way that the corridors work; exiting to the left will move Willy up a level as he reappears to the right and going off to the right will reverse the process.

Although it's based on Dave Hughes' *Endless Forms Most Beautiful* on the Spectrum, this isn't a straight conversion; the coder sfranck72 has tweaked the gameplay and added some ideas of his own including some new patrol routes for the enemies.

 Score **86%**



» [MSX] If in doubt, it's always best to run away!

FROGGER ARCADE

» **FORMAT:** COMMODORE 64 » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.EU/FROGGER-ARC-C64 » **DEVELOPER:** HOKUTO FORCE

There's been a spate of arcade conversions and emulations recently, with *Frogger Arcade* hopping into view over Christmas. For those who haven't played the original, the player takes control of a frog moving through gaps in traffic on a busy motorway and then using logs and turtles to safely cross a river to his home.

Getting five frogs to safety completes the stage and increases the danger level, with the game changing how the traffic and safe spots on water move as well as adding in new hazards; even holding still can be risky because the frog expires with the on-screen timer.

There are already quite a few clones of *Frogger* on the C64 but the attention to detail here is really commendable; the difficulty curve feels quite close to the original so getting through the first couple of passes shouldn't be too difficult before things start getting tricky.





>> Score **88%**

ROUNDUP

You may remember Daniele Liverani's rock opera-inspired plarformer *Genius: Into The Toy Warehouses* for the Apple II. Well, now he's converted the game for the C64 as well! Kikstart.eu/genius-c64 goes to the CSDb where the game can be downloaded. We've also noticed Daniele talking at length at Plus/4 World and offering up a few previews – have a look behind Kikstart.eu/genius-prv-264.

Speaking of conversions, Atari Age regular Phaeron recently released his conversion of Howard Scott Warshaw's *Raiders Of The Lost Ark* from the Atari 2600 to the Atari 8-bit. The graphics have been replicated and all of the Easter eggs are present too, search for the Ark at Kikstart.eu/raiders-a8.

PIETRO BROS

» **FORMAT:** ZX SPECTRUM » **DEVELOPER:** CRISTIAN M. GONZALEZ » **DOWNLOAD:** KIKSTART.EU/PIETRO-SPEC » **PRICE:** FREE

Speaking of arcade conversions, the platform-based adventures of siblings Pietro and Luizo when they're dragged into a world full of giant pipes after consuming a dodgy pizza might seem somewhat familiar to anybody who has previously played *Mario Bros.*, since it's based on that early outing of Nintendo's famed plumbers.

The majority of the enemies appear at the top of the playfield and slowly work their way downwards; they can be stunned with a well-timed head butt to their current platform from below and then touched to knock them off screen completely before they have a chance to right themselves. As the game progresses, new enemies appear which take more than one hit to stun or freeze one of the platforms to make it slippery, so new strategies must be devised. Overall, this is a solid arcade platformer for the Spectrum that should entertain and challenge most players.

>> Score **82%**



» [ZX Spectrum] Very familiar, but at the same time a little different.



MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – WWW.RETROGAMER.NET



STAR LETTER

GIVE US A HAND

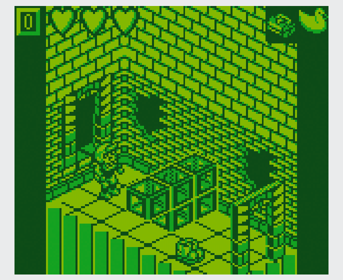
Dear **Retro Gamer** team,
I'm a big fan of the magazine and have been subscribing for about six years now, and in general I wouldn't want to change it. But there is something that bothers me, and that's how handheld consoles get disproportionately low coverage within the magazine.

Consider this: the Game Boy outsold the Mega Drive and SNES combined, but I'd bet that the magazine has done features on many more games for the home consoles. The Nintendo DS is one of only two machines ever to sell over 150 million units and is steadily approaching retro status itself, yet it's never even been represented with a Future Classic.

I know not everybody likes handhelds, but I'd imagine there are many thousands of people like me who started out as handheld gamers, and would welcome an increase in coverage.

Aaron Edmondson

You'd be surprised at how much love there is for handhelds on Retro Gamer – Darran's Vita collection is huge, and it's common to see Sam or Drew pull out a Game Boy Advance over lunch.



» [Game Boy] *Monster Max* is an example where we could get significant access about its creation.

The issue with handhelds is that they host a comparatively low level of original software. All too often they're treated by third-party publishers as places to put cut-down versions of console counterparts. Take the Game Gear, for instance – it was a reasonably popular system, which outsold the Saturn and Dreamcast, but it doesn't receive the same love as the other two machines today because so much of its library consisted of Master System and Mega Drive hand-me-downs. Needless to say, the story of how a game was created is more interesting than how it was adapted.

Still, you have a point. All we can promise is that we'll always try to cover significant handheld games when we can!





» [Mega Drive] *Tanglewood* is an example of what happens when modern developers work on old hardware.

48K CREATIVITY

Dear **RG**,
Games have evolved so much that they've lost the character of what made the classics back in the day so special, with their art inlays, new game smell and detailed game manuals. Sadly the digital age has killed these off in favour of cheap materials and poorly-designed artwork.

But if it was possible to challenge the game designers of today by putting them into a room with archaic Eighties technology and a pen and pencil plus 48k of memory to play with, and asking them create a game with their own imaginations, no doubt they would be stumped as everything is so easy now compared to what it was like back then.

Cisko Kidd

Gaming has definitely changed, but we don't think it's necessarily fair to lay the blame at the door of developers. Packaging and artwork are typically handled by the publisher, which is usually keen to drive down costs in order to increase profit margins.

Also, we'd agree that most developers today would struggle with your challenge, but we're not sure that it's because creating games now is easier than it was in the Eighties. Back in the Spectrum days, Matthew Smith could create a hit game on his own. Today's big-budget releases are created by hundreds of people, with incredibly specialised jobs. Some people will work on a game for years and never do anything outside of programming facial animations. The kind of all-rounders that created 8-bit games – programming, graphics, sound and all – really only exist in today's indie scene.

Still, there are people that do go back – we're looking forward to *Tanglewood*, a forthcoming Mega Drive game from Matt Phillips, who has worked on many modern games including the *Lego* series and *Homefront: The Revolution*.

CIRQUE DU QUOI?

Hello,
In about 2002 or 2003 I used to play this game on the computer that had a circus theme. In the first level you bowled down gorillas, in the second level, clowns used to vaporise out of mirrors in the fun house, and in the third level you were under the big top with the ring master.

Does anyone remember this game or know the name of it, or where I can find it again? Please help!

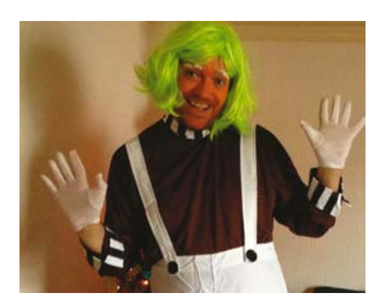
Thanks loads,

TJ

We've done some research but we can't match this up with any game that we know. It sounds like it could be pretty stressful for any sufferers of coulrophobia. Can anybody help TJ?

SUPER COLUMNIST 82

Hi **Retro Gamer**,
Isn't it funny how sometimes, you don't know that you're ready for a change until it happens? I was always fond of Paul Davies' columns in the magazine, and expected them to continue for years to come. However, I can happily say that I'm really pleased with Mr Biffo's inclusion as a columnist – not because he's any



» Ray likes Paul Rose's columns, so here's a picture of Paul on an average Tuesday.

Don't forget to follow us online for all the latest retro updates

RetroGamerUK @RetroGamer_Mag Retro Gamer Magazine @RetroGamerMag



CONTACT US

Snail Mail: Retro Gamer, Future Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: darran.jones@futurenet.com

better or worse, but simply because it's refreshing to have a different voice.

Thank you for bringing him on to the magazine, and I look forward to the continued evolution of **Retro Gamer** over the coming years.

Ray Vincent

We're glad that you're enjoying his columns, Ray. We've thought that Paul would be a good fit for the magazine for many years now, we hope he'll continue to contribute to the magazine for some time.

GAMERS WITHOUT BORDERS

Hi **RG**,

Nintendo has announced that the Switch will be region-free, and the PS4 and Xbox One are import-friendly. That leaves the 3DS as the only region-locked machine on the market, and that can't be long for the world now that Nintendo's home console is a handheld too.

Does this mean that region-locking is now a problem that's exclusive to retro gaming? It's crazy to think that our kids might grow up in a world where they can simply grab games from overseas.

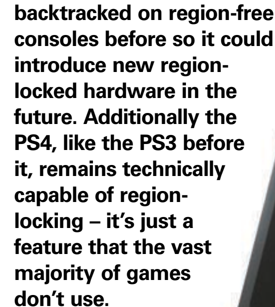
Eddie Johnson

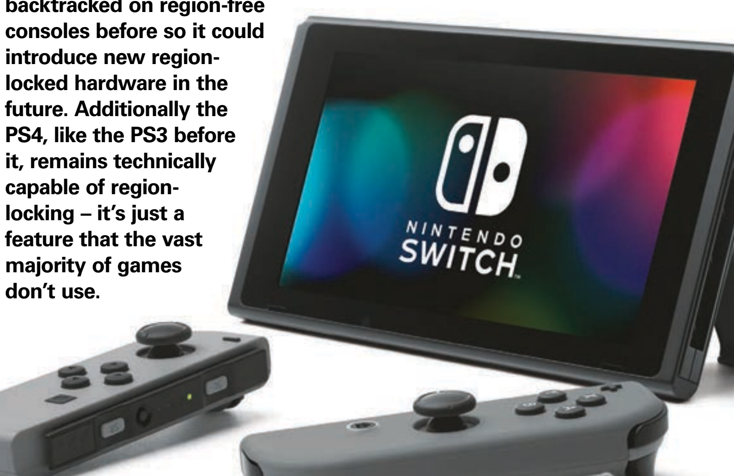
While it looks like region-locked games are about to be consigned to the 'gone but not missed' category of gaming tropes, we wouldn't take the champagne off ice just yet. After all, Nintendo has backtracked on region-free consoles before so it could introduce new region-locked hardware in the future. Additionally the PS4, like the PS3 before it, remains technically capable of region-locking – it's just a feature that the vast majority of games don't use.

DISCUSSED THIS MONTH

Nintendo Switch

We're always excited to get our hands on a new console, and Nintendo's Switch has proven no different. Nick decided that he had to be in on day one and placed a preorder as soon as they went up. Darran is sold on the idea but wants to take a look at the games in the flesh before opening his money bags. Drew and Sam, meanwhile, are still playing their GBAs…







From the forum

Every month, **Retro Gamer** asks a question on the forum and prints the best replies. This month we wanted to know…

Worst jump from 2D to 3D?

Mayhem

The two that spring immediately to mind are *Castlevania* and *Final Fight*, neither of which performed anywhere near as well in execution or success when they tried the third dimension.

joefish

Gauntlet suffered from too much going on in 3D – shots and explosion effects flying everywhere in a low camera angle making it impossible to keep an eye on all the players, and multi-layered levels where it wasn't always clear which way you were supposed to go.

ncf1

Golden Axe would have to be the worst I've ever seen. A 90%+ rated 2D game transformed into a 3D game that I would give no more than 10% is a hefty fall from grace in anyone's books.

paranoid marvin

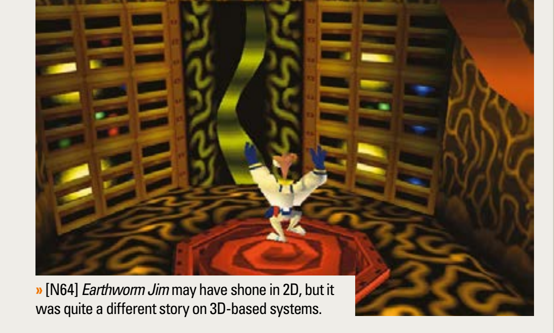
Escape From Monkey Island is the second worst 2D – 3D conversion I've ever seen.

Matt_B

I'll go with *3D Lemmings*. It went from being all about pixel-perfect positioning to a horribly frustrating clunky affair where you had to relearn everything you knew from the 2D games via trial and error.

TheDude18

Worms. While I don't mind the 3D version and occasionally play it on the PS3, the adding of depth to the aiming system was a step too far making the game overly complicated and frustrating.



» [N64] *Earthworm Jim* may have shone in 2D, but it was quite a different story on 3D-based systems.

Megamixer

Fatal Fury: Wild Ambition deserves a shout too. Unnecessary and not very fun to play. Crushingly hard too!

RetroMartin

For me I would say the *Oddworld* franchise. *Munch* was vastly inferior to *Odyssee* and *Exodus*. It controlled a lot worse and lost much of its charm. I wasn't massive on *Stranger's Wrath*.

Eric

Flashback to *Fade To Black*. It lost its rotoscoped smooth animation, moveset and controls and most importantly its atmosphere and cool sci-fi story and setting.

kiwimike

Sonic for me. Loved the 2D game, but *Sonic* didn't take to 3D as naturally as *Mario*.

Northway

I count myself lucky I haven't seen 3D *Defender*.



Future Publishing Ltd
Richmond House, 33 Richmond Hill
Bournemouth, Dorset, BH2 6EZ
☎ +44 (0) 1202 586200
Web: **www.retrogamer.net**
www.greatdigitalmags.com
www.futureplc.com

Editorial
Editor **Darran 'Missing Lynx' Jones**
darran.jones@futurenet.com
☎ 01202 586237
Production Editor **Drew '32-bit Only' Sleep**
Senior Staff Writer **Nick 'Vertical Spread' Thorpe**
Designer **Sam 'Three-pointer' Ribbits**
Editor In Chief **Dave Harfield**
Senior Art Editor **Stephen Williams**
Photographer **James Sheppard**

Contributors
Luke Albigés, Tom Charnock, David Crookes, Paul Drury, Craig Grannell, Jason Kelk, Graeme Mason, Rory Milne, Paul Rose, Ed Smith

Advertising
Digital or printed media packs are available on request.
Head of Sales **Hang Deretz**
☎ 01202 586442
hang.deretz@futurenet.com
Advertising Director **Andrew Church**
andrew.church@futurenet.com
Account Manager **Anthony Godsell**
anthony.godsell@futurenet.com

International
Retro Gamer is available for licensing. Contact the International department to discuss partnership opportunities.
Head of International Licensing **Cathy Blackman**
☎ +44 (0) 1202 586401
cathy.blackman@futurenet.com

Subscriptions
For all subscription enquiries:
retrogamer@servicehelpline.co.uk
☎ 0844 848 8412
☎ Overseas +44 1795 592 872
www.imaginesubs.co.uk
Head of subscriptions **Sharon Todd**

Circulation
Circulation Director **Darren Pearce**
☎ 01202 586200

Production
Production Director **Jane Hawkins**
☎ 01202 586200

Management
Finance & Operations Director **Marco Peroni**
Creative Director **Aaron Asadi**
Editorial Director **Ross Andrews**

Printing & Distribution
Printed by Southernprint Ltd, 17-21 Factory Road, Upton Industrial Estate, Poole, Dorset, BH16 5SN

Distributed in the UK, Eire & the Rest of the World by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU
☎ 0203 787 9060 www.marketforce.co.uk

Distributed in Australia by Gordon & Gotch Australia Pty Ltd, 26 Rodborough Road, Frenchs Forest, New South Wales 2086
☎ + 61 2 9972 8800 www.gordongotch.com.au

ISSN 1742-3155





Future is an award-winning international media group and leading digital business. We reach more than 57 million international consumers a month and create world-class content and advertising solutions for passionate consumers online, on tablet & smartphone and in print.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR).
www.futureplc.com

Chief executive Zillah Byng-Thorne
Non-executive chairman Peter Allen
Chief financial officer Penny Ladkin-Brand

Tel +44 (0)1225 442 244



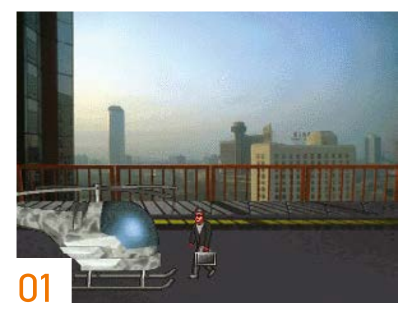
>>LOAD 166
nextmonth
ON SALE 23 MARCH 2017
DIGITAL DISNEY
We speak to the developers who breathed life into some of Disney's most iconic characters in our latest Bluffer's Guide
ALSO INSIDE
Target: Renegade, Rise Of The Amiga 500, Beyond Castle Wolfenstein, Cronosoft, Mo Warden, Labyrinth, Road Rash trilogy, Windjammers, Tusker, Lomax, PSP, Thunderblade, Yooka-Laylee and much more

ENDGAME



THE STRANGERS

» You've fought your way through the city in this violent, late-era Amiga beat-'em-up, and after punching countless thugs to death you've managed to reach the Godfather, the man behind the city's crime epidemic. You're ready to solve the problem once and for all, but your target has the devil's own luck. Will peace be restored? There's only one way to find out – let's skip to the ending…



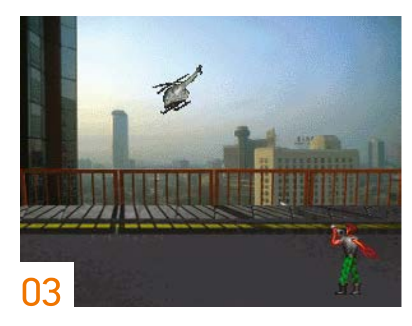
01

» Our antagonist, the Godfather, has made it to the top of the building and is about to flee in a conveniently-located helicopter. Despite having to take this course of action, his casual pace suggests a distinct lack of concern.



02

» Blimey, no wonder he wasn't worried – in the time it's taken for you to even reach the screen, he's already got the pilot to take off! Unable to apprehend the criminal in person, your only option is to engage in some lethal justice.



03

» Unfortunately, you need some distance on the shot so that your high-powered rocket launcher doesn't end up killing you too. But now the Godfather's chopper is not only a distant target, but a moving one. You carefully take aim…



04

» Boom! With a mighty crashing sound, an explosion rocks the rooftops of the city. As the debris begins to fall to the streets below, you take satisfaction in a job well done – finally, you'll be able to walk down the street without seeing mobsters shaking down old ladies for their pensions!



05

» But as the smoke clears, you realise the horrible truth – you've not hit the Godfather's helicopter, but a nearby skyscraper. Not only have you let the mob boss escape, you've caused untold property damage and probably killed innocent people. Good job, vigilante. Go wreck someone else's city, you're unwelcome here.